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Arvindbabu Deshmukh Mahavidyalaya Bharsingi
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INDEX

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Prakash Pawar
Principal

VSPM Academy of Higher Education

ARVINDBABU DESHMUKH MAHAVIDYALAYA

BHARSINGI, Dist. Nagpur - 441305

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IQAC
Arvindbabu Deshmukh
Mahavidyalaya, Bharsingi


PRINCIPAL
ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST. NAGPUR

2022-2023



नवीन शैक्षणिक धोरण आणि भारतीय शिक्षणाचा इतिहास

प्राचार्य डॉ. प्रकाश पवार

अरविंदबाबू देशमुख महाविद्यालय

भारसिंगी, तह-नरखेड जि. नागपूर

मोबा. न. - ८८०६२९४७५७,

ई.मेल-pdpawar700@gmail.com

सारांश:

प्राचीन भारतातील शिक्षणपद्धती ही तत्कालीन जगाच्या शिक्षणपद्धतीपेक्षा उत्तम होती, परंतु कालांतराने भारतीय शिक्षणपद्धती ढासळली. परकीयांनी इथली शिक्षणपद्धती ज्या प्रमाणात व्हायला हवी होती त्या प्रमाणात विकसित केली नाही. भारतीय शिक्षणाला संक्रमण काळात अनेक आव्हाने आणि समस्यांना तोंड द्यावे लागले. आजही ही आव्हाने आणि समस्या आपल्यासमोर आहेत ज्यांना सामोरे जावे लागेल. १८५० पर्यंत भारतात गुरुकुलाची प्रथा चालू होती, परंतु इंग्रजी शिक्षणाच्या संक्रमणामुळे भारतातील प्राचीन शिक्षणपद्धती संपुष्टात आली आणि भारतातील अनेक गुरुकुल खंडित होऊन त्यांच्यामध्ये कॉन्व्हेंट व सार्वजनिक शाळा सुरू झाल्या. प्रस्तुत शोधपत्रात नवीन शैक्षणिक धोरण आणि भारतीय शिक्षणाचा इतिहास यावर विस्तृत विवेचन करण्यात आलेले आहे.

संकेत-शब्द : शिक्षणपद्धती, इतिहास, विविध शैक्षणिक धोरणे, नवीन शिक्षण निती

उद्देश्य:

- भारतीय शिक्षण पद्धतीचा प्राचीन इतिहास अभ्यासणे
- भारतीय शिक्षण पद्धतीत झालेले बदल अभ्यासणे
- भारतीय शिक्षण पद्धतीचा विकास अभ्यासणे
- नवीन शैक्षणिक धोरण अभ्यासणे

प्रस्तावना :

मुघल साम्राज्याच्या पतनानंतर भारताच्या पारंपारिक शिक्षण व्यवस्थेला आणि शैक्षणिक संस्थांना मोठा धक्का बसला आणि देशातील राजकीय अस्थिरतेमुळे शैक्षणिक चातावरणात सातत्याने घसरण होऊ लागली. भारत जिंकल्यानंतरही इंग्रजांनी शिक्षण खाजगी हातात राहू दिले. इंग्रजी शिकवण्यासाठी शाळांचे जाळे उभारण्याची कल्पना प्रथम चार्ल्स ग्रँट या ईस्ट इंडिया कंपनीच्या नागरी सेवकाच्या मनात आली. शिक्षणाच्या

प्रसारासाठी इंग्रजी भाषा हे सर्वात योग्य माध्यम असल्याचे त्यांनी सांगितले. खरे तर इंग्रजी शिक्षणाची रचना चार्ल्स ग्रँटने तयार केली होती. म्हणूनच त्यांना मभारतातील आधुनिक शिक्षणाचे जनक म्हटले जाते. दरम्यान, १७८१ मध्ये, गव्हर्नर जनरल वॉरेन हेस्टिंग्ज यांनी कंपनीच्या भारतीय अधिकाऱ्यांना पर्शियन (तत्कालीन कामकाजाची भाषा) चे कार्यरत ज्ञान देण्याच्या उद्देशाने कलकत्ता मद्रशाची स्थापना केली. त्यानंतर, १७८४ मध्ये, हेस्टिंग्जचे सहकारी सर विल्किन्सन जोन्स यांनी एशियाटिक सोसायटी ऑफ बंगालची स्थापना केली, ज्याने प्राचीन भारतीय इतिहास आणि संस्कृतीच्या अभ्यासासाठी महत्त्वपूर्ण प्रयत्न केले. त्यांनी मॅशियाटिक रिसर्च नावाचे मासिक प्रकाशित केले, ज्याचा उद्देश भारताचा गौरवशाली भूतकाळ उजेडात आणणे हा होता. नोव्हेंबर १७८४ मध्ये, एशियाटिक सोसायटी ऑफ बंगालचे सदस्य असलेल्या विल्किन्सन यांनी मूळ मश्रीमद भगवद्गीताफ संस्कृतमधून इंग्रजीत प्रथमच अनुवादित केली. पुढे १७८७ मध्ये विल्किन्सनने महितोपदेशफ्रे भाषांतरही केले. १७८९ मध्ये विल्किन्सन जोन्स यांनी कालिदासाच्या 'अभिज्ञान शाकुंतलम'चे इंग्रजीत भाषांतर केले. यानंतर विल्किन्सन जोन्स यांनी १७८९ मध्ये 'गीतागोविंद'चा इंग्रजीत अनुवाद केला आणि १७९४ मध्ये त्यांच्या मृत्यूनंतर 'मनुस्मृती'चा अनुवाद 'इन्स्टिट्यूट ऑफ हिंदू लॉ' या नावाने प्रकाशित झाला. खरे तर मिस्टर विल्किन्सन जोन्स आणि विल्किन्सन हे भारतातील विज्ञानाचे जनक होते. मनुस्मृती हा पहिला ग्रंथ आहे ज्याचा संस्कृतमधून इंग्रजी भाषेत अनुवाद प्रकाशित झाला. ब्रिटीश रहिवासी जोनाथन डॅकन यांच्या प्रयत्नांमुळे, १७९२ मध्ये बनारसमध्ये एक संस्कृत महाविद्यालय उघडण्यात आले, ज्याचा उद्देश हिंदूंचा धर्म, साहित्य आणि कायद्याचा अभ्यास आणि प्रसार करणे हा होता. १८०० मध्ये लॉर्ड वेलस्लीने कंपनीच्या नागरी अधिकाऱ्यांच्या शिक्षणासाठी फोर्ट विल्यम कॉलेजची स्थापना केली. या महाविद्यालयात इंग्रजी-हिंदुस्थानी शब्दकोश, हिंदुस्थानी


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शंकरराव खरात यांचे 'तराळ-अंतराळ' या आत्मचरित्राचे प्रगल्भ स्वरूप

प्रा. डॉ. रिता द. वाळके (डंभाळे)

सहयोगी प्राध्यापिका, मराठी विभाग
अरविंदबाबू देशमुख महाविद्यालय भारसिंगी
ता. नरखेड जि नागपूर

सारांश :

गावकीच्या कामात जगणाऱ्या दलितांपैकी एक असणारा सूर्याग्न्य शोषित माणूस म्हणून वकिली, साहित्यिक, संपादक, लेखक असून असा खडतर प्रवास करणाऱ्या शंकरराव खरात यांचे 'तराळ-अंतराळ' आत्मचरित्र आहे. उपेक्षित जीवनातून वाचन-शिक्षणाने घडलेल्या माणसाचे आत्मचरित्र आहे. दलित माणसाच्या जीवनात क्षणोक्षणी मानभंग, अपमान, अवहेलना यांचे अनुभव येतात. पारंपरिक चौकटीने तेच त्यांचे जीवन वसून प्रभुत्वसंपन्न असणारा शोषकवर्ग आणि प्रभुत्वाखाली दडपला गेलेला शोषितवर्ग यांचे अवकाश या आत्मचरित्रातून व्यापक स्वरूपात चित्रित झालेले आहे. शंकरराव खरात यांचे 'तराळ-अंतराळ' हे आत्मचरित्र त्यांच्या जीवनाची कथा आहे, पण त्याचबरोबर ही एक 'स्टोरी ऑफ द अनटचेबल' आहे. म्हणजे एका व्यक्तीच्या, एका समाजाच्या, एका गावच्या मानसिक, वैचारिक व सामाजिक जीवनात घडत चाललेल्या विकासाची ही कथा आहे.

नावना :

शंकरराव रामा खरात हे व्यक्तित्व साहित्यिक, संपादक म्हणून प्रसिद्ध आहे. वेगळ्या पैलूंनी युक्त आहे. खरात यांचा जन्म सांगली जिल्ह्यातील 'आटपाटी' या छोटयाशा खेड्यात ११ जुलै १९२१ रोजी, गावकीचे काम करणाऱ्या झतराळफ रामा महाराच्या घरी झाला. म्हणजे एका दलित कुटुंबात झाला सर्व प्रकारच्या प्रतिकूल परिस्थितीतून वाट काढत १९३८-१९३९ ला बी.ए. (ऑनर्स), १९४७-१९४८ मध्ये एल.एल.बी. इत्यादी शिक्षण घेतले. घरचे शेरडे राखून, गुरांची हाडे घेऊन, मेलेल्या मढ्याच्या अंगावरच्या मिळणाऱ्या कपड्याचे सदरे शिवून व घालून, वाचनालयात काम करून, अशी अनेक प्रकारची मिळेल ते कामे करून आपले शिक्षण पूर्ण केले. वकिलीच्या क्षेत्रात कार्य केले. वकिलीसोबत सामाजिक, राजकीय, कामगारक्षेत्रात काम केले. शेड्युल्ड कास्ट्स व शेड्युल्ड ट्राइब्स डिफेन्स कामगार संघटनेची स्थापना व सेक्रेटरी म्हणून काम पाहिले. १९५४ मध्ये 'दलित फेडरेशन' या राजकीय संस्थेची सुरुवाती अंक ७ - डिसेंबर २०२२

संघटनेचे महाराष्ट्रचे संघटक सेक्रेटरी म्हणून काम पाहिले. तसेच १९६१-६२ च्या दरम्यान शेड्युल्ड कास्ट्स फेडरेशनचे मुखपत्र 'प्रबुद्ध भारत' चे कार्यकारी संपादक म्हणूनही काम पाहिले.

वकिली व्यवसायासोबतच खरातांनी साहित्य निर्मितीही केली. त्यांची वेगवेगळ्या स्वरूपाची पुस्तके प्रकाशित झाली असून ती कथा, कादंबरी, आत्मचरित्र, संपादन, संशोधन अशा विविध साहित्य प्रकारांमधील आहेत. तपशीलच घाबयाचा तर तो पुढीलप्रमाणे देता येईल-बारा बलुतेदार (१९५९), तडीपार (१९६१), सांगवा (१९६२), टिटवीचा फेरा (१९६३), दौडी (१९६५), गावशीव (१९७०), सुटका (१९६४), आडगावचे पाणी (१९७०) इत्यादी अनेक कथासंग्रह प्रसिद्ध आहेत. या कथासंग्रहांतून विविध विषय त्यांनी मांडले. जसे मांग, बेरड, वडार, महार, पोतराज, मुरली अशा बहिष्कृत जीवन जगणाऱ्या असपूरय, आदिवासी, भटक्या अशा उपेक्षित समाजाचे दर्शन घडवून दलित कथा समृद्ध केली. तसेच झोपडपट्टी, गावाचा टीनोपाल गुरुजी, हातभट्टी, माणूसपणाची हाक (१९५७) मी माझ्या गावाच्या शोधात (१९८३) इत्यादी कादंबऱ्या लिहिल्या. ग्रामीण जीवनातील विषय व त्यातील वातावरण त्यांच्या कादंबऱ्यांमधून दिसते. त्यांचे जगणे, त्यांची भाषा, अनुभव यामधून त्यांनी निराळे जीवन रेखाटले आहे.

परिवर्तनप्रक्रियेच्या बांधीलकीतून लेखक आपल्या भोवतीचे वास्तव तपासतो. अशा समाज वास्तवातूनही लेखक घडत जातो. 'तराळ-अंतराळ' या दलित आत्मचरित्रातून दलित-शोषितांच्या जीवनाला वाचा फोडली आहे. पोटातील भूक शमविण्यासाठी या आत्मचरित्रात शंकररावांनी भाकरीसाठी केलेल्या दाहक अनुभवांना आविष्कृत केले आहे. भाकरीसाठी विविध कामे खरात करताना दिसतात. तसेच शिक्षणासाठी चाललेली धडपड, त्यासाठी खाव्या लागणाऱ्या खस्ता आणि तरीही शिक्षणाचा ध्यास, हे दलितांच्या जीवनातील महत्त्वाचे सूत्र त्यांनी मांडले आहे.

शिक्षणासाठी सर्वस्व पणाला लावणारे खरात आणि त्यांना प्रेरणा देणारे घरातील गरीबीचे वास्तव किंवा त्यांचा बाप


PRINCIPAL

(१८९)



नवीन शैक्षणिक धोरण अंतर्गत विद्यार्थी रोजगाराच्या संधी

प्रा.डॉ. रिता द वाळके

सहयोगी प्राध्यापक, मराठी विभाग
अरविंदबाबू देशमुख महाविद्यालय भारसिंगी
रा.तु.म.नागपूर विद्यापीठ नागपूर
मो. क्र. ७७४३८९९३६९
100ritadambhale@gmail.com

सारांश :

शिक्षण हे जीवन परिवर्तनाचे प्रभावी साधन आहे. कोणत्याही राष्ट्राचे भविष्य हे शिक्षण धोरणावर अवलंबून असते. आर्थिक, सामाजिक, सांस्कृतिक, विकासाची प्रक्रिया शिक्षणातून उभी राहत असते. राष्ट्रासाठी असणारे शिक्षण धोरण हे राष्ट्राच्या भविष्यासाठी विकासाचा एक मार्ग असतो. त्यामुळे शिक्षणाचे धोरण आखताना ते भविष्य वेधी असायला हवे. शिक्षण धोरण म्हणजे त्या देशाच्या भविष्याच्या विकासाची दिशा होय.

'परिवर्तनवादी मनुष्यबळ' याचा विचार करता, शैक्षणिक धोरणेनुसार सर्वांना समान शिक्षण समानता गुणवत्ता परवडणारे शिक्षण आणि कार्याप्रती उत्तरदायित्व या पाच स्तंभांचा विचार केला आहे. शिक्षण धोरणात अत्यंत व्यापक दृष्टिकोन राखण्यात आलेला आहे. रोजगाराभिमुख शिक्षण आनंददायी करण्याबरोबर ते जीवनाभिमुख आणि अधिक रोजगार भिमुख करण्यावर भर देण्यात आला आहे. नवीन शैक्षणिक धोरण सशक्त आणि समर्थ शिक्षण व्यवस्था उभी करणारे आहे.

भारत देश हा तरुणांचा देश आहे. या तरुण युवकांच्या भविष्यातील रोजगाराच्या दृष्टीने विचार केला, तर या युवकांना कौशल्य विकसित शिक्षण देऊन व्यावसायिक शिक्षणाचा विचार करणे आवश्यक आहे. आज विद्यार्थ्यांना रोजगारासाठी कौशल्य पूरक शिक्षणाची गरज आहे, तंत्र विकसित झाल्याने औद्योगिक क्षेत्रात व संगणकाच्या माध्यमातून विद्यार्थी स्वयंरोजगार व कौशल्य विकास व्यावसायिक शिक्षणाचे महत्त्व जाणून आहे. यामुळे त्यांच्या मूलभूत गरजा पूर्ण होण्यास मदत होईल. तेव्हा नवीन शिक्षण धोरण अंतर्गत पायाभूत सुविधा उपलब्ध करून तंत्रांचे महत्त्व असणारे शिक्षण व कारखान्यात उपयोगी पडणारे शिक्षण स्वयंरोजगारातून निर्माण करणे गरजेचे आहे अफाट लोकसंख्या असलेल्या भारत देशाचा विचार करता शिक्षणाच्या मुख्य प्रवाहातून रोजगार निर्मिती शिक्षण प्रणाली अस्तित्वात आणली तर विविध प्रकारच्या रोजगाराच्या संधी विद्यार्थ्यांना

उपलब्ध करून विद्यार्थ्यांची म्हणजेच (युवकांची) बेकारी नष्ट होऊन युवकांना स्वबळावर उभे राहण्यास मदत होईल

प्रस्तावना :

नवे शैक्षणिक धोरण हे सन २०२३-२४ या शैक्षणिक सत्रात लागू होत आहे. या दृष्टीने विद्यार्थी रोजगाराच्या संधी याचा विचार करणे आवश्यक आहे.

भारत देशाला शिक्षणाची प्राचीन परंपरा आहे. गुरुकुलाच्या माध्यमातून व ऋषीमुनींच्या आश्रमातून नीतिशास्त्र, युद्ध, कला व राजनीति तसेच शास्त्रीय व धार्मिक पद्धतीने शिक्षण देण्याची पद्धत होती. या शिक्षणातून पंडित, भिक्षुकी व ज्ञानार्जन गुरुकुल सेवा, आश्रम सेवा इत्यादी सारख्या रोजगाराच्या संधी प्राचीन काळात दिसून येतात. भारत स्वतंत्र झाल्यानंतर शैक्षणिक सुधारणा व त्यात बदल करणे गरजेचे होते व आधुनिकता आणणे ही गरजेचे होते. तेव्हा भारत सरकारने वेळोवेळी वेगवेगळ्या अभ्यास गटाच्या माध्यमातून अभ्यास करून शैक्षणिक सुधारणा केलेल्या आहेत. १९४९ मध्ये विद्यापीठ शिक्षण आयोगाने स्वातंत्र्योत्तर काळात भारतातील उच्च शिक्षणाला दिशा देण्याचे काम केलेले आहे. यामध्ये शिक्षण व्यवस्था बहु विविध बहुभाषिक करण्याकडे ही अधिक भर देण्यात आलेला आहे.

रोजगाराचे महत्त्व :

नवीन शैक्षणिक धोरणाचा विचार करून विद्यार्थी युवकांच्या रोजगार विषयक वाढत्या गरजा लक्षात घेतल्या तर, विद्यार्थ्यांमध्ये विविध रोजगार संबंधी कल्पना येऊन कौशल्य विकास व रोजगार निर्मिती शिक्षण प्रणालीतून त्यांना भरपूर मदत होईल. विद्यार्थ्यांच्या बौद्धिक क्षमतेच्या विकासानुसार बौद्धिक, भावनिक, सामाजिक, क्रीडात्मक प्रगती होण्याच्या दृष्टीने महाविद्यालयीन शिक्षण प्रणालीत बहुशास्त्रीय शिक्षण प्रणाली आली की, विद्यार्थी आपल्या कला, आवड व सुप्त गुणांचा विचार करून इतर शाखेचा विषय निवडू शकतो. विविध विषय असल्याने विविध क्षेत्रात त्यांना संधी उपलब्ध होईल. तसेच

PRINCIPAL

ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST NAGPUR



नवीन शैक्षणिक धोरणाद्वारे मातृभाषेला प्राधान्य - एक दृष्टि

डॉ. साधना अ. जिचकार

मराठी विभाग प्रमुख

अरविंदबाबू देशमुख महाविद्यालय

भारसिंगी, तह-नरखेड, जि. नागपूर

मोब. नं. - ७७२१०९८४९८

सारांश:

शिक्षण हे असे साधन आहे जे देशातील मुलांचे आणि तरुणांचे भविष्य घडवते. त्यामुळे देशाच्या शिक्षण व्यवस्थेत देशाच्या सांस्कृतिक जाणिवेबरोबरच भविष्याकडे पाहण्याचा दृष्टीकोनही स्पष्टपणे दिसायला हवा. तब्बल साडेतीन दशकांच्या प्रदीर्घ प्रतिकेनंतर २९ जुलै २०२० रोजी पंतप्रधान नरेंद्र मोदी यांच्या अध्यक्षतेखाली झालेल्या मंत्रिमंडळाच्या बैठकीत भारतीय भाषांना प्राधान्य देणाऱ्या नवीन शैक्षणिक धोरणाला अखेर मंजुरी देण्यात आली. याच अनुषंगाने या शोधपत्रात भारतीय भाषेला आणि मातृभाषेला प्राधान्य देण्याच्या या नवीन शैक्षणिक धोरणावर विचार मंथन करण्यात आलेले आहे.

बीजशब्द: नवीन शैक्षणिक धोरण, भारतीय भाषा, मातृभाषा, मराठी

उद्देश्य:

- नवीन शैक्षणिक धोरणाचे वैशिष्ट्य अभ्यासणे
- नवीन शैक्षणिक धोरणात अंतर्भूत प्रांतीय भाषेचे महत्त्व अभ्यासणे
- मातृभाषेतून शिक्षणाची गरज अभ्यासणे
- मराठी भाषेचे बदलते स्वरूप अभ्यासणे

प्रस्तावना:

भारत हे शाश्वत ज्ञान परंपरेचे केंद्र राहिले आहे. परकीय गुलामगिरीच्या काळात ज्ञानाच्या या चिरंतन परंपरेला अनेक रूपांनी नष्ट करण्याचे प्रयत्न झाले. ब्रिटीशांच्या काळात, मॅकॉलेच्या शैक्षणिक धोरणांनी संपूर्ण भारतीय शिक्षण व्यवस्था वेगवेगळ्या प्रकारे नष्ट केली. राष्ट्रीय भावना, राष्ट्रभिमानाची प्रतीके, वीर परंपरा, संत परंपरा, त्याग, सेवा, जीवनमूल्य अशा विविध महत्त्वाच्या गोष्टी शिक्षणातून काढून टाकण्यात आल्या. स्वतंत्र भारतातही शैक्षणिक धोरणांवर हिंदीसह भारतीय भाषांच्या जागी इंग्रजीचे वर्चस्व कायम राहिले. इंग्रजी हे चांगले ज्ञान आणि उत्तम शिक्षणाचा समानार्थी बनले. आपली शिक्षण धोरणे माणसाला एक साधन म्हणून पाहत राहिली. ती त्याला एक चांगला व्यापारी

बनवत राहिली आणि बाजाराशी सुसंगत राहिली, त्यामुळे मानव बहुतांशी मातृभाषा, परोपकार आणि भारताच्या भावनेपासून दूर जात राहिला. आपल्या देशात अनेक भाषा आहेत, ज्यांना अनेक विद्वान भाषा आणि बोली या दोन वर्गात विभागतात. संविधानाच्या ८ व्या अनुसूचीमध्ये सुरुवातीला १४ भाषा होत्या, ज्या आता २२ झाल्या आहेत. याशिवाय २०११ च्या जनगणनेनुसार, बोलीसह १३६९ भाषा आहेत, ज्यामध्ये १२१ भाषा १० हजारांहून अधिक लोक बोलतात. युनेस्कोच्या म्हणण्यानुसार, गेल्या ५० वर्षांत १९७ भारतीय भाषा नामशेष झाल्या आहेत, अनेक नामशेष होण्याच्या मार्गावर आहेत. एखाद्या भाषेच्या मृत्यूने त्या भाषेच्या भाषकांची सभ्यता, संस्कृती इत्यादी संपतात. अशा स्थितीत भाषेचे महत्त्व आणखी वाढते. राष्ट्रीय शैक्षणिक धोरणात त्याचा चांगलाच स्वीकार करण्यात आला आहे. या दृष्टिकोनातून धोरणात असे लिहिले आहे कि, संस्कृतीच्या संरक्षण, संवर्धन आणि प्रसारासाठी त्या संस्कृतीच्या भाषांचे संरक्षण आणि संवर्धन करावे लागेल. राष्ट्रीय शैक्षणिक धोरणाच्या शिफारशीनुसार, शालेय शिक्षणाच्या स्तरावर किमान इयत्ता ५ वी पर्यंत आणि जिथे शक्य असेल तिथे ८ वी पर्यंत मातृभाषा हे शिक्षणाचे माध्यम असावे. शालेय ते उच्च शिक्षण स्तरापर्यंतचा अभ्यासक्रम द्विभाषिक भाषेत उपलब्ध करून द्यावे, हे अधिक महत्त्वाचे आहे, असेही म्हटले आहे. आज पूर्व प्राथमिक शिक्षणापासून सुरू झालेल्या इंग्रजी माध्यमाच्या शर्यतीत हे पटकन पचनी पडणे कठीण आहे, पण जे तर्कशुद्ध आणि शास्त्रीय आहे ते स्वीकारूनच योग्य दिशेने पावले टाकता येतात. आपले मूल ग्रॅज्युएशन, पोस्ट ग्रॅज्युएशनच्या अभ्यासात इंग्रजीच्या मागे सहा वर्षे वाया घालवते, हा वेळ त्याच्या विषयात घालवला तर तो आपल्या विषयात अधिक सक्षम होऊ शकतो, असेही महात्मा गांधी म्हणाले होते. जागतिक स्तरावरील भाषेशी संबंधित सर्व अभ्यासातून मातृभाषा हेच शिक्षणाचे माध्यम असावे, राष्ट्रीय शैक्षणिक धोरण-२०२० मध्ये भारतीय भाषांचे संवर्धन आणि विकास, विस्तार या संदर्भात आवश्यक असलेल्या बहुतांश गोष्टींचा समावेश करण्यात आला आहे. पण सर्वात मोठा प्रश्न त्याच्या अंमलबजावणीचा आहे.

PRINCIPAL



भारत-चीन संबंधों की समकालीन प्रकृति - एक राजनीतिक समीक्षा

प्रा.राजेंद्र घोरपडे

राजनीति विज्ञान विभाग प्रमुख
अरविंदबाबू देशमुख महाविद्यालय,
भारसिंगी, तह-नरखेड, जि-नागपूर
ई मेल- ghorpade.raj6@gmail.com

सारांश:

भारत की तरह चीन की गिनती दुनिया की सबसे प्राचीन सभ्यताओं के घरों में होती है। भारतीय और चीनी समाजों की संस्कृतियों के संबंध में ऐसी कोई रेखा खींचना संभव नहीं है। इन दोनों सभ्यताओं के बीच प्राचीन काल से या तो घनिष्ठ रूप से जुड़े होने चाहिए थे, जब बड़ी दुश्मनी पैदा होनी चाहिए थी और भयंकर युद्ध होने चाहिए थे। हालांकि, १९६२ में एक महीने के एकतरफा आक्रमण के अपवाद के साथ, दोनों देशों ने एक दूसरे के खिलाफ हथियार नहीं उठाए हैं। दूसरी ओर, चीन और जापान सदियों से पड़ोसी देशों के बीच दुश्मनी रखते हैं और इसका परिणाम सबसे भयानक युद्धों में हुआ है। इसी तरह, द्वितीय विश्व युद्ध के अंत तक यूरोप के राष्ट्रों के बीच अत्यधिक शत्रुता के कारण यूरोप को सदियों तक युद्धों का सामना करना पड़ा। प्राचीन काल से लेकर आज तक भारत और चीन के बीच मैत्रीपूर्ण संबंध स्थापित होने की संभावना बार-बार सामने आई है। कई बार, दोनों देशों के बीच सहयोग चरम पर आ गया और फिर अचानक समाप्त हो गया। प्रस्तुत शोधपत्र में भारत-चीन संबंधों की ऐतिहासिक स्थिति और समकालीन प्रकृतिपर विचार व्यक्त किये गये हैं।

सूचक-शब्द: भारत-चीन, राजनीतिक, ऐतिहासिक स्थिति, समकालीन प्रकृति, बदलते आयाम

उद्देश्य :

- भारत-चीन संबंधों का इतिहास जानना
- भारत-चीन युद्ध के कारण जानना
- भारत-चीन संबंधों कि समकालीन प्रकृति जानना
- भारत-चीन संबंधों के बदलते आयाम जानना

प्रस्तावना:

यह सर्वविदित है कि प्राचीन काल में दोनों देशों के बीच घनिष्ठ संबंध थे। लेकिन वे अचानक टूट गए और कई शताब्दियों तक दोनों क्षेत्रों ने एक दूसरे से स्वतंत्र रूप से अपने वैश्विक

महत्व को बनाए रखा। हम केवल अनुमान लगा सकते हैं कि प्राचीन काल में स्थापित शैक्षिक, वाणिज्यिक और आध्यात्मिक संबंध क्यों जीवित नहीं रह सके। एक तो मौर्य साम्राज्य ने प्राचीन काल में भारत में एक ऐसी व्यवस्था का निर्माण किया जब दोनों देश बहुत मित्रवत थे और चीनी साम्राज्य आज जितना बड़ा नहीं था। यह आज के चीन के आकार का आधा भी नहीं होना चाहिए। समय के साथ-साथ दोनों देशों के संबंध तब टूट गए जब ठीक इसके विपरीत स्थिति पैदा हो गई। अर्थात् मौर्य साम्राज्य के बाद भारत में सरकार की व्यवस्था विभाजित हो गई थी और यह आंशिक रूप से अराजक थी और छोटे-छोटे राज्यों की स्थापना हुई थी। इसके विपरीत, चीनी साम्राज्य ने विस्तार किया और पूरे चीन में एक प्रणाली स्थापित की। हालांकि इस स्थिति और दोनों देशों के बीच संबंधों के टूटने को सीधे तौर पर जोड़ना संभव नहीं है, लेकिन दो चीजों का असर जरूर पड़ा होगा। एक तो सम्राट अशोक के बाद भारत में बौद्ध धर्म का पतन होने लगा और बौद्ध भिक्षुओं और विद्वानों का राजश्रय से चीन सहित पूर्वी एशिया में आना-जाना बंद हो गया। दूसरी ओर, चीनी साम्राज्य के विस्तार और व्यवस्था की स्थापना के साथ, चीनी समाज तेजी से आत्मकेंद्रित हो गया।

इस काल में चीन में मध्य साम्राज्य की अवधारणा का विकास हुआ। इसके अनुसार विश्व की सबसे उन्नत, गम्भीर और समृद्ध सभ्यता चीन में विद्यमान है और इस सभ्यता से बाहर की दुनिया जंगली या हीन है यह भावना चीन में फैली हुई है। यह माना जाता था कि ऐसे असभ्य लोगों के संपर्क में रहने की कोई आवश्यकता नहीं है। इसी मानसिकता के कारण शक्तिशाली हिमालय को पार कर भारत आने का चीनी विद्वानों का निश्चय शिथिल हो गया। इसका मतलब यह नहीं है कि चीनी कहीं और नहीं जा रहे थे। विशेष रूप से, चीनी व्यापारी समुद्र के रास्ते दक्षिण पूर्व एशिया, हिंद महासागर से दक्षिण भारत (केरल) और पूर्वी अफ्रीका तट के कुछ स्थानों की यात्रा कर रहे थे। दूसरी ओर, चीनी व्यापारियों ने मध्य एशिया और पश्चिम एशिया के महत्वपूर्ण व्यापारिक शहरों के साथ नियमित

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संशोधक

आत्मनिर्भर भारत संधी व आव्हाने : एक राजकीय दृष्टीक्षेप

प्रा.राजेंद्र घोरपडे

राज्यशास्त्र विभाग प्रमुख

अरविंदबाबू देशमुख महाविद्यालय

भारसिंगी, तह-नरखेड, जि. नागपूर

मोब. नं. - ९७६४०९००११

ई.मेल-ghorpade.raj6@gmail.com

सारांश :

स्वातंत्र्य मिळाल्यापासून भारत आत्मनिर्भर होण्याचे स्वप्न पाहत आहे. स्वातंत्र्यापूर्वीही भारताच्या स्वातंत्र्यलढ्यात महात्मा गांधींनी सविनय कायदेभंगाची चळवळ चालवली होती, ज्यामध्ये लोकांना परदेशी वस्तूवर अवलंबून न राहता भारतात बनवलेल्या वस्तूवर अवलंबून राहण्याचे आवाहन करण्यात आले होते. महात्मा गांधी स्वतः देखील स्वदेशी वस्तू वापरत असत आणि महात्मा गांधी हे पहिले व्यक्ती होते ज्यांनी आत्मनिर्भर भारताच्या दिशेने पहिले पाऊल टाकले. पण खेदाची गोष्ट म्हणजे स्वातंत्र्याच्या ७० वर्षांनंतरही भारताने या स्वप्नाकडे दुसरे पाऊल टाकलेले नव्हते. मात्र जगात पसरलेल्या या कोरोना महामारीमुळे भारताने पुन्हा एकदा आत्मनिर्भर होण्याचे स्वप्न पाहिले आणि स्वावलंबनाचा खरा अर्थ समजला. त्यानंतरच भारताच्या हृदयात आत्मनिर्भर होण्याचे स्वप्न फुलू लागले. याच अनुषंगाने प्रस्तुत शोधपत्रात आत्मनिर्भरता आणि भारतापुढील संधी व आव्हाने या दृष्टीने विचार व्यक्त करण्यात आलेले आहे.

संकेत-शब्द: आत्मनिर्भरता, लोकशाही, राजकीय मोहीम, विदेश निती

उद्देश्य:

- आत्मनिर्भरता संकल्पना अभ्यासणे
- भारताची आधुनिक लोकशाही अभ्यासणे
- विदेश नितीमध्ये होणारे बदल अभ्यासणे
- भारताची आत्मनिर्भरतेच्या दृष्टीने होणारी वाटचाल अभ्यासणे
- भारतापुढील असलेल्या संधी व आव्हाने अभ्यासणे

प्रस्तावना:

भारताला आत्मनिर्भर बनवण्याच्या उद्देशाने पंतप्रधान श्री. नरेंद्र मोदी यांनी १२ मे २०२० रोजी आत्मनिर्भर भारत अभियान सुरू केले होते. या मोहिमेअंतर्गत येत्या काही वर्षांत भारत

देशातील बहुतांश वस्तूंचे उत्पादन स्वतः करणार आहे. त्यामुळे या मोहिमेला आत्मनिर्भर भारत अभियान असे नाव देण्यात आले आहे. लोकल फॉर व्होकल असे या मोहिमेचे घोषवाक्य आहे. बाहेरील वस्तूवर अवलंबून न राहता आपल्याच देशात उत्तम आणि दर्जेदार उत्पादनाची निर्मिती करणे हा या मोहिमेचा मुख्य उद्देश आहे. या मोहिमेअंतर्गत, देशातील प्रत्येक क्षेत्राकडे लक्ष दिले जाईल ज्यामध्ये भारत इतर देशांकडून मदत घेते. कारण सध्या आपल्या दैनंदिन जीवनातील बहुतांश वस्तू चीन, अमेरिका, सौदी अरेबिया, कोरिया अशा अनेक देशांतून येतात. जोपर्यंत आपण इतर देशांवर अवलंबून आहोत तोपर्यंत आपण विकसित देश होऊ शकत नाही. आपल्या देशाच्या विकासाला बळकटी आणायची असेल, तर सर्वप्रथम आपण स्वावलंबी व्हायला हवे. आणि ही मोहीम आम्हाला स्वावलंबी होण्यासाठी आणि भारताची अर्थव्यवस्था सुधारण्यासाठी खूप मदत करेल. आत्मनिर्भर भारत अभियान सुरू करण्यासाठी भारत सरकारने २० लाख कोटी रुपयांचे आर्थिक पॅकेज जाहीर केले आहे. आत्मनिर्भर भारत अभियान दोन मुख्य टप्प्यात राबविण्यात येणार आहे. पहिल्या टप्प्यात इलेक्ट्रॉनिक्स, प्लास्टिक, वैद्यकीय, कापड आणि खेळणी या क्षेत्रांना प्रोत्साहन दिले जाईल. दुसऱ्या टप्प्यात एअर कंडिशनर, मोबाईल, कपडे, औषधे, फर्निचर, रत्ने, दागिने, फुटवेअर आणि भांडवली वस्तू या क्षेत्रांना प्रोत्साहन दिले जाईल. आपला देश नैसर्गिक संसाधने आणि जैवविविधतेने परिपूर्ण आहे, पण आपण त्याचे खूप नुकसान करतो. निसर्गाचे रक्षण केले तर भारताला स्वावलंबी होण्यास मदत होईल. कारण नैसर्गिक संसाधनांचा वापर करून आपण आपल्याच देशात कच्चा माल तयार करू शकतो. याशिवाय भारताला स्वावलंबी बनवण्यासाठी देशातील प्रत्येक व्यक्तीने आपले कर्तव्य प्रामाणिकपणे पार पाडून देशाला आपापल्या स्तरावर सहकार्य करावे लागेल. भारताला स्वावलंबी बनवण्यात तरुण आणि विद्यार्थी महत्त्वाचे योगदान देऊ शकतात. भारतातील अनेक तरुण अमेरिका, चीन आणि रशियासारख्या विकसित देशांमध्ये

(१५६)

पुरवणी अंक २ - जून २०२३


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शोध प्रभा

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रुस-युक्रेन युद्ध आणि भारताची भूमिका - एक राजनैतिक मंथन

प्रा.राजेंद्र घोरपडे
राज्यशास्त्र विभाग प्रमुख
अरविंदबाबू देशमुख महाविद्यालय
भारसिंगी, तह-नरखेड
जि-नागपूर

सारांशः

भारत हा लोकसंख्येच्या बाबतीत जगातील दुसऱ्या क्रमांकाचा देश आहे आणि आता जगातील पाचव्या क्रमांकाची अर्थव्यवस्था आहे. भारत आणि अमेरिका यांचे जवळचे संबंध आहेत परंतु रशिया हा एक भारताचा विश्वासू भागीदार आहे. एक प्रमुख ऊर्जा पुरवठादार आहे आणि भारतीय सैन्यासाठी बहुतेक शस्त्रास्त्रांचा स्रोत आहे. पंतप्रधान नरेंद्र मोदी आणि व्लादिमीर पुतिन यांच्यातील वैयक्तिक संबंधही कोणापासून लपलेले नाहीत. पंतप्रधान नरेंद्र मोदी अशा नेत्यांपैकी एक आहेत जे पुतीन यांच्याशी कधीही थेट बोलू शकतात. रशियाकडून तेल खरेदी केल्याने पाश्चात्य देश आणि युक्रेन संतप्त होत असल्याने हे युद्ध भारतासाठीही कसोटीचा काळ आहे. संयुक्त राष्ट्रात रशियाच्या आक्रमणाविरोधात अमेरिकेने आणलेल्या निषेधाच्या प्रस्तावावरही भारत मतदानापासून दूर राहिले आहे. प्रस्तुत शोधपत्रात रुस-युक्रेन युद्ध आणि भारताची भूमिका यावर चिंतन करण्यात आलेले आहे.

सूचक-शब्दः रुस-युक्रेन युद्ध, युरोपीय संघ, भारत, अमेरिका

प्रस्तावनाः

रशिया आणि युक्रेनमधील युद्धाला ९ महिने झाले असून ते थांबण्याचे नाव घेत नाही. दोन्ही देशांचे सैन्य एकमेकांवर सतत घातक बॉम्ब आणि क्षेपणास्त्रांचा वर्षाव करत आहेत. जिथे युक्रेन पाश्चात्य देशांकडून मिळणाऱ्या शस्त्रास्त्रांवर सहा लावत आहे, तिथे रशियाचा शस्त्रसाठा रिकामा होत आहे आणि तो इराणकडून क्षेपणास्त्रे आणि ड्रोन खरेदी करत आहे. रशियाच्या या शस्त्रांपैकी ज्याची सर्वाधिक चर्चा होत आहे, ते आत्मघाती ड्रोन सर्वात प्रभावी ठरत आहे. रशियाच्या लष्कराने इराणच्या शहीद-१३६ आत्मघाती ड्रोनच्या मदतीने युक्रेनला अंधारात टाकले आहे. त्याचबरोबर युक्रेनही आत्मघाती ड्रोनच्या मदतीने रशियावर हल्ले तीव्र करत आहे. हे तेच आत्मघाती किंवा कामिकाझे ड्रोन आहेत ज्यांच्या मदतीने अझरबैजानने आर्मेनियाला युद्धात पराभूत केले. आत्मघाती ड्रोनच्या या यशानंतर आता भारतीय लष्करानेही त्यांच्यावर मोठा सपाटा लावला आहे. रशिया आणि युक्रेनमधील युद्धादरम्यान पुतिन यांच्या लष्कराने अणुहल्ल्याचा सराव केला आहे. याला तिसरे महायुद्धचे शवपेचही म्हटले जात आहे. रशियाची ही आक्रमक वृत्ती पाहता अमेरिका आता हाय अलर्टवर आहे. वाढत्या तणावाच्या पार्श्वभूमीवर अमेरिका युरोपला उच्च-अचूक रणनीतिक अणुबॉम्बचा पुरवठा वाढवत आहे. एका रशियन कर्नलच्या म्हणण्यानुसार, ब्रिटन आणि अमेरिकेला नष्ट करण्याचा हा सराव होता. रशियाला प्रत्युत्तर देण्यासाठी यूएस आर्मी आणि नेव्हीने हायपरसॉनिक शस्त्राची चाचणी केली. इतकेच नाही तर आता अमेरिकेने निर्णय घेतला आहे की, एका आठवड्यात



खेल के क्षेत्र में सूचना प्रौद्योगिकी और अनुसंधान की आवश्यकता

Dr. Manojkumar Varma

Director of phy. edu.

Arvindbabu Deshmukh Mahavidyalaya

Bharsingi, Dist-Nagpur

Mob.No-9422824499

Email Id - varmamanojkumar15@gmail.com

सारांश :

खेलों की उत्पत्ति उतनी ही पुरानी है जितनी मानव जाति का इतिहास. शुरुआत में यह केवल मनोरंजन के लिए किया जाता था, लेकिन अब खेल नाम, प्रसिद्धि और वित्तीय लाभ और लाभदायक व्यवसाय बन गए हैं. आधुनिक खेल प्रतिस्पर्धा की भावना से भरे हुए हैं और जीतने के लिए खेले जाते हैं. खेल दुनिया भर में दिन का क्रम बन गया है. खेलों में उत्कृष्टता वाले देशों को साथी देशों से विशेष ध्यान मिलता है. नतीजतन, सभी देश खेल के क्षेत्र में उत्कृष्टता प्राप्त करने में गंभीरता से शामिल हैं, आजकल खेल केवल मांसपेशियों की शक्ति का प्रदर्शन नहीं है, बल्कि दिमागी खेल है. स्वस्थ शरीर के साथ स्वस्थ मन भी जरूरी है. भारत दुनिया का दूसरा सबसे अधिक आबादी वाला देश है. लेकिन खेल के क्षेत्र में वे पिछड़े रहे हैं और ओलंपिक में स्वर्ण पदक जीतना अभी भी मभारतीय एथलीटों के लिए मुश्किल है. स्वतंत्रता के बाद, देश में बड़ी संख्या में शारीरिक शिक्षा और खेल संस्थान स्थापित किए गए हैं, जिनमें से कुछ संबंधित क्षेत्रों में अनुसंधान कार्यक्रम प्रदान करते हैं. इसलिए, एथलीटों और खेल वैज्ञानिकों को खेल प्रदर्शन को बढ़ाने के लिए नई विधियों और तकनीकों की पहचान करनी चाहिए. उपरोक्त सभी को ध्यान में रखते हुए, खिलाड़ियों और खेल वैज्ञानिकों को समयबद्ध, प्रभावी और कुशल तरीके से अद्यतन जानकारी प्रदान की जानी चाहिए. पुस्तकालय और सूचना केंद्र इस संबंध में महत्वपूर्ण भूमिका निभा सकते हैं, उन्हें खिलाड़ियों और खेल वैज्ञानिकों को उनकी जरूरतों के आधार पर संग्रह विकसित करते हुए सूचना प्रौद्योगिकी आधारित सूचना सेवाएं भी प्रदान करनी चाहिए. इस संबंध में प्रस्तुत शोध पत्र में खेल के क्षेत्र में अनुसंधान एवं प्रौद्योगिकी तथा उसके महत्व को परिलक्षित किया गया है.

सूचकशब्द : खेल, अनुसंधान, प्रौद्योगिकी, शारीरिक शिक्षा

उद्देश्य :

- खेलों के इतिहास का अध्ययन करना
- खेल के क्षेत्र में अनुसंधान की आवश्यकता का अध्ययन करना
- खेल के क्षेत्र में सूचना प्रौद्योगिकी की आवश्यकता का अध्ययन करना
- खेल विज्ञान की आवश्यकता का अध्ययन करना

परिचय :

खेल की उत्पत्ति का पता किसी भी सभ्यता की शुरुआत से लगाया जा सकता है. विश्व इतिहास विभिन्न संदर्भों में खेलों का उल्लेख करने वाले उदाहरणों और उपाख्यानों से भरा पड़ा है. हर सभ्यता, ग्रीक, रोमन, भारतीय और चीनी, ने अपने स्वदेशी खेलों का विकास किया और उन्हें संस्कृति का एक अभिन्न अंग बनाया. प्राचीन काल में सांस्कृतिक नैतिकता और नैतिकता के प्रसार के लिए खेलों को एक माध्यम के रूप में उपयोग किया जाता था. खेल मानव जाति के इतिहास जितना पुराना है क्योंकि शारीरिक गतिविधि मानव अस्तित्व का आधार है और मनोरंजन मानव जाति की मूलभूत आवश्यकता है. चाहे औपचारिक रूप से संगठित हों या न हों, प्रागैतिहासिक काल से मानव इतिहास में खेलों और खेलों ने एक महत्वपूर्ण भूमिका निभाई है क्योंकि जीवित रहने के लिए शारीरिक रूप से फिट होना आवश्यक था. इसलिए, शारीरिक गतिविधि का उपयोग सभी समाजों द्वारा आत्म-संरक्षण, स्वास्थ्य और भलाई और मनोरंजन के लिए किया जाता है. शारीरिक शिक्षा के रूप में संगठित शारीरिक गतिविधि की अवधारणा शिक्षा की आधुनिक अवधारणा के साथ उत्पन्न हुई. आजकल यह एक ऐसी वस्तु बन गई है जिसका उपयोग नाटक और प्रदर्शनी के लिए किया जाता है. यह भी माना जा सकता है कि खेल आध्यात्मिकता, लक्ष्यों की प्राप्ति, टीम वर्क, व्यक्तित्व विकास, पहचान की भावना और संतुष्टि के अवसर प्रदान करते हैं, जो आमतौर पर रोजमर्रा की जिंदगी में उपलब्ध नहीं होते हैं. हालांकि खेल


PRINCIPAL

आत्मिक उन्नति हेतु नई शिक्षा नीति मे योगशास्त्र का महत्व- एक विश्लेषण

Dr. Manojkumar M. Varma

Director of phy.edu

Arvindbabu Deshmukh Mahavidyalaya

Bharsingi, Dist-Nagpur

Mob.No-9422824499

Email Id - varmamanojkumar15@gmail.com

सारांश:

'योग' शब्द ही एकता और मानव जीवन की एक एकीकृत दृष्टि को दर्शाता है। आज की दुनिया संघर्ष, हिंसा, अस्वस्थता आदि से त्रस्त है। इसलिए, योग, जो दूरसों के प्रति शरीर, मन और दृष्टिकोण में आमूल-चूल सकारात्मक परिवर्तन लाता है। व्यक्ति के साथ-साथ पूरे समाज के लिए उपचारात्मक होगा। हम सभी को नियमित रूप से योग का अभ्यास करना चाहिए। आइए हम इस प्राचीन विज्ञान के असंख्य लाभों का पता लगाएं। जब योग शास्त्र प्रत्येक व्यक्ति के जीवन में एक अभिन्न स्थान लेता है, तभी समाज का सर्वांगीण विकास होगा। प्रस्तुत शोधपत्रिका मे आत्मनिर्भरता कि तरफ बढ़ते हुये भारत कि नई शिक्षा नीति के गठन मे योग अभ्यास का महत्व इसपर विचार व्यक्त किये गये है।

मुख्य-शब्द: आत्मनिर्भर भारत, योगशास्त्र, सामाजिक एकता, राष्ट्रनिर्माण

प्रस्तावना :

योग विश्व को भारत की देन है। दुनिया भर के 170 से अधिक देशों के नागरिक उत्साह के साथ 'विश्व योग दिवस' मना रहे हैं, यह भारतीयों के लिए गर्व की बात है। योग का यह प्राचीन विज्ञान मनुष्य के शारीरिक, मानसिक और आध्यात्मिक विकास की कुंजी है। एक एकीकृत में तरीके से, व्यक्ति की आंतरिक चेतना बाहरी वातावरण के साथ समन्वित होती है। इस प्रकार, व्यक्ति मन के एक प्रकार के समाधि का अनुभव करता है। कई लोगों ने योग को परिभाषित किया है। हालांकि, योगाचार्य बी के एस अयंगर की परिभाषा मन है। अयंगर कहते हैं - "योग हमारे लिए है, हम क्या सहन करते हैं।" करने की आवश्यकता नहीं है, यह हटाना या ठीक करना सिखाता है। इसी प्रकार यह असाध्य को सहन करने की क्षमता प्रदान करता है। करीब पांच हजार

साल पुरानी परंपरा वाला योग शास्त्र तन और मन के लिए बेहद फायदेमंद है। इसने व्यक्ति के शारीरिक, मानसिक और आध्यात्मिक स्वास्थ्य पर इसके सकारात्मक प्रभाव के कारण लगातार इतने वर्षों तक भारतीय भूमि में अपना अस्तित्व बनाए रखा है। संयुक्त राष्ट्र महासभा में अपने पहले ही संबोधन में प्रधानमंत्री नरेंद्र मोदी ने योग कि महिमा मंडित कि। उन्होंने कहा, मयोग प्राचीन भारतीय परंपरा की अनूठी देन है। योग शरीर और मन, विचार और क्रिया, धैर्य और संतोष का एक संयोजन है। यह समग्र स्वास्थ्य के लिए एक समग्र दृष्टिकोण है। योग व्यायाम का एक रूप नहीं है। यह जीवनशैली में बदलाव और आत्म-जागरूकता के माध्यम से प्रकृति और पूरी दुनिया के साथ एकता पैदा करने का एक उपचार तरीका है। योग शास्त्र हमें उस जलवायु परिवर्तन से निपटने में भी मदद कर सकता है जिसका सामना वर्तमान में दुनिया कर रही है। 2014 में, भारत ने संयुक्त राष्ट्र महासभा से एक मसौदा प्रस्ताव के माध्यम से 21 जून को अंतर्राष्ट्रीय योग दिवस घोषित करने का अनुरोध किया। इसके बाद, अगले वर्ष, संयुक्त राष्ट्र ने 21 जून, 2015 को पहले विश्व योग दिवस के रूप में घोषित किया। खास बात यह है कि दुनिया के 175 देशों ने योग दिवस के संकल्प का समर्थन किया। योग के महत्व को प्रस्तुत करते हुए, संकल्प ने स्वस्थ विकल्पों को अपनाने और व्यक्तिगत और समूह स्तर पर स्वस्थ जीवन शैली विकसित करने के महत्व पर प्रकाश डाला।

आत्मिक उन्नति और योग :

आध्यात्मिक स्तर पर जुड़ने का अर्थ है व्यक्तिगत चेतना का सार्वभौमिक चेतना के साथ एकीकरण। व्यावहारिक स्तर पर योग शरीर, मन और भावनाओं में संतुलन और तालमेल बिठाने का माध्यम है। साथ ही योग करते समय आसन, प्राणायाम, मुद्रा और ध्यान बहुत जरूरी है। इसलिए यह कहना गलत नहीं होगा कि योग एक जीवन पद्धति है और



Tagore's Contribution to Literature and Education

Dr. Dadarao.K. Upase

Head Dept. of English

Arvinbaba Deshmukh Mahavidyalaya

Bharsingi, Tah-Narkhed, Dist-Nagpur

Mail Id – dadaraoupase@gmail.com

Abstract :

The name of Rabindranath Tagore is known in every household in India who won the Nobel Prize for his brilliant literature. His poetry collection Gitanjali is famous. Rabindranath Tagore is the world famous poet, philosopher, literary figure and pioneer of new education. Rabindranath Tagore was not only a poet but also a great literary man, storyteller, lyricist, musician, dramatist, essayist, painter, great thinker, and mentor. He was the owner of extraordinary talent, he was called Gurudev. The national anthem of India is given to us by Rabindranath Tagore. From childhood, he was very fond of poetry, stories and writing. He had a great love for nature. sometimes while observing nature, he would get so engrossed and revel in his imaginary world. This great writer of India played his important role in shaping the national consciousness in the freedom struggle. The present research paper reflects on Tagore's educational thought and his contribution to literature.

Keywords: Rabindranath Tagore, educational thought, literature, philosopher

Objectives:

- To study Tagore's Life Introduction
- To study Tagore's Thoughts on Education
- To study Tagore's contribution in the field of education
- To study Tagore's contribution to literature
- To study the importance of Tagore's work in present era

Preface :

Rabindranath Tagore was born on 7th May 1861 in Jodasako Thakurwadi village in Kolkata to a prominent Bengali family. His father's name was Devendranath Tagore and his mother's name was Shardabai. He was the youngest of 13 children of his parents. His mother died when he was young. Devendranath Tagore was a senior leader of the Brahma Samaj and head of his locality. He always had to travel for his work. As a result, little Rabindranath Tagore was brought up by his servants. Tagore was intelligent from childhood, interested in studies. He did his primary education at St. Xavier's School in Kolkata. Tagore's father wanted him to become a barrister. But Rabindranath Tagore was interested in literature. In 1878, his father admitted him to the University College in London to obtain a barrister's degree. But as he was not interested in barrister studies, he returned in 1880 without taking a degree. After returning to India from England, he married and spent a few years at his estate in Sealdah. He measured his estates far and wide. He saw the life of rural and poor people closely. During the period 1891 to 1895, he wrote many short stories based on the background of rural Bengal. Rabindranath Tagore was intelligent by birth. He was a great poet, literary man, writer, painter and social worker. It is said that he wrote his first poem as a child. He was only 8 years old when he wrote his first poem. He wrote a short story in 1877 at the age of sixteen. Rabindranath Tagore wrote about 2230 songs. He was a writer who made a

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BHARSINGI, DIST. NAGPUR



(2022-23) (D.W)

संशोधक

NEP and the relevance of Ambedkar's educational thoughts

Dr. Dadarao K. Upase

Head Dept. of English

Arvindbabu Deshmukh Mahavidyalaya
Bharsingi, Tah-Narkhed, Dist-Nagpur

Abstract:

Dr. Babasaheb Ambedkar was a versatile personality. Dr. Babasaheb Ambedkar gave a message of wisdom to the dark life of the downtrodden, the labourers, the displaced, and the oppressed. He awakened the depraved society towards its rights by warning the spark of social revolution from the corrupted mind. His life was like a raging ocean. Education is the tool of social transformation. They thought that it should be used. A society which is illiterate has lost everything due to lack of education, education creates a sense of duty and right in a person, education should reach all strata of the society and while explaining the importance of education to our education deprived society in very simple and earnest terms, Babasaheb says, "Education is the milk of a tiger, He who prays will not remain without murmuring." Babasaheb wanted to create a self-respecting modern society that accepted the human values of equality, freedom, fraternity through higher education. This was the real foundation of Babasaheb's educational movement. Higher education is the only medicine for all social pains, says Dr. Ambedkar. The new educational policy and the relevance of Ambedkar's educational thoughts have been pondered over.

Keywords: Dr. Babasaheb Ambedkar, Educational Contribution, Policy, Thoughts

Preface:

Many great men have been born on the holy land of India and have cultivated social

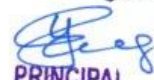
commitment and national loyalty by working round the clock for the country and society. His legacy of service is still a role model, and guide for the countrymen. The name of Dr. Babasaheb Ambedkar is at the top among these great men. Dr. Babasaheb Ambedkar, the architect of the Indian state constitution, was born to father Ramji and mother Bhimabai on April 14, 1891. Bal Bhima's father, Ramji, was careful to inculcate good morals in his children, as he himself loved reading, so there was a collection of books in the house. He used to bring the children to read these good books. Therefore, in the last moments of Babasaheb's life, the habit of reading and scholarly reflection is found in him. The subjects of study of Tukaram and Kabir Babasaheb seem to have become in the future life. Dr. Babasaheb was a versatile personality. He had perfect knowledge and understanding of every field. Dr. Babasaheb Ambedkar, with his great eloquence and skillful leadership in various fields such as social, political, economic, educational, religious, journalism, laws, gave a message of wisdom to the dark life of the downtrodden, Dalits, displaced workers and oppressed. Dr. Ambedkar awakened the depraved society to its rights by warning of the sparking of social revolution from the corrupted minds.

Educational contributions :

He has written many books and articles in his lifetime. Today the national and international situation is changing rapidly. Communal divisions and terrorist forces are on the rise in our country. A huge crisis of unemployment is

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पुर्वणी अंक १ - जून २०२३



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ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST. NAGPUR



(2022-23) (A.K)

संशोधक

Arun Joshi's Social Realism

Mr. Ashish S. Kate

Research Scholar
Assistant Professor
Department of English
Arvindbabu Deshmukh Mahavidyalaya,
Bharsingi

Dr. Kapil Singhel

Associate Professor
Head, Department of English
Vasantrao Naik Government Institute
of Arts and Social Sciences,
Nagpur

Abstract :

Literature is a mirror and an interpretation of life. Indo-English literature has witnessed varied themes like freedom struggle, Gandhism, partition, East- West encounter and alienation written by various writers. The introduction of the theme of alienation in the indoor Indo - English literature opens a new realm of understanding of human nature and behavior. It helps one to observe an individual in terms of his responses and reaction to other human beings, the environment and with his own self. Today Indo- English fiction finally created its own standing at the international level.

At this stage it would indeed be interesting and beneficial to know discuss the art of one of the major Indo - English novelists. In fact the motive behind this study is to observe and analyze the artistic talent and intrinsic qualities of a leading Indo- English novelist. The most obvious and natural choice is Arun Joshi. He seems to be the novelist of today's world in India, who breaks the age old tradition of Mulk Raj Anand, R.K.Narayan and Raja Rao has created a strategy of presenting his protagonist's experience in human life without losing that life itself. Hence the purpose of this study is an attempt to record this monumental trend in the Indo - English fiction.

Though Arun Joshi did not have a very long fictional career, yet his contribution has been remarkable, and has earned him high applause and serious attention. He embarked upon his literary voyage in 1968, with the publication of

The Foreigner. He has published four more novels and a collection of short stories. These are: *The Strange Case of Billy Biswas* (1971), *The Apprentice* (1974), *The Last Labyrinth* (1981), and *The City and the River* (1994). He may not get ranked with such major writers as R. K. Narayan, Mulk Raj Anand, Raja Rao, but his genius is deservedly in the process of being recognized. The selection *The Last Labyrinth* for the 1982 Sahitya Academy Award was but recognition of his genius and popularity and brought him further into the limelight.

Introduction :

Before taking a leap in the fictional world of Arun Joshi, I not only went through a few research articles but also doctoral researches which were carried out on the writer at the different places of higher learning in India. While there is no dearth of critical investigation of Joshi's work, most of these studies limit themselves to highlighting his various preoccupations and literary interests. Stressing the distinctiveness of Joshi's novels from those of Mulk Raj Anand, Raja Rao, R.K. Narayan, Bhabani Bhattacharya, Kamala Markandaya, Nayantara Sahgal and Manohar Malgonkar, Madhusadan Prasad (1982) observes that his novels are singularized by existentialist problems and resultant anger, agony, psychic quest and the like. R. K. Dhawan (1986) finds in Joshi's fictional world a revelation of a world where man is confronted by the self and the questions of his existence.

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पुस्तकी अंक १ - जून २०२३

PRINCIPAL

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BHARSINGI, DIST. NAGPUR



(2022-23) (V.P.R.)

संशोधक

Employment generation effect of the MGNREGA on rural households in the Gondia district

Mr. Vijay P Rahangdale

Research Scholar,

Gondwana University, Gadchiroli

Assistant Prof. & Head, Dept. of Economics,

A.D.M Bharsingi, Dist. Nagpur

Email: vp1985@gmail.com , Mob.No.8805071165

Abstract :

The Mahatma Gandhi National Rural Employment Guarantee Act initiative was designed by the government of India with an emphasis on equitable development strategies, and it was made into a legislation in the year 2006. The statute promises to provide 100 days of work to help improve the living conditions of those who are impoverished and live in rural areas. The current research assesses the impact of MGNREGA on employment level, employment generation pater in specific month, and general social and economic situations of employees. It does this by utilizing secondary data that is accessible on the MGNREGA website. This is a descriptive and analytic research. After assessing several household employment inputs and socioeconomic characteristics, the research concluded that the scheme is operating better in the Maharashtra district of Gondia. The research concluded that employment, income, socioeconomic conditions, and quality of life all increased. MGNREGA has a favorable influence on the living level of workers by creating additional employment opportunities.

KEYWORDS: MGNREGA, employment level, Maharashtra, Gondia, living level of workers

1. Introduction :

1.1. Who will be deemed to be "poor"?

One of the biggest problems facing the administration in the years after the country's

1947 declaration of independence was lowering the amount of poverty that already existed there. Several committees have been established for this. More over 300 million people in India live in poverty, however that number has been cut from around 55% in 1973 to roughly 27% in 2004 thanks to the efforts of the government, as detailed in the country's 11th National Development Plan. Yet, about 30% of the Indian population still lives in constant poverty.

1.2. Keynes' Theory of Employment

It is the degree of effective demand for goods and services that determines the size of the economy and the number of jobs available, as proposed by Keynes. Unemployment is blamed on insufficient demand. He called on the government to engage in "pump priming" in order to increase people's incomes and so increase their buying power. He advocated for a more hands-on role for the government in the creation of jobs and the expansion of economic opportunities. Spend money on individuals and hire them to do public job for you. In general, the number of people working increases (decreases) as the amount of national production rises (falls). As a result, in India's view, those who look for work under the MGNREGA programme enhance effective demand and the spending power of beneficiaries in the near term.

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पुरवणी अंक ४ - मार्च २०२३

PRINCIPAL

SHRI VINDBABU DESHMUKH MAHAVIDYALAY,
BHARSINGI DIST NAGPUR

Conservation of Natural Resources and Asset Creation Work in the Gondia District through MGNREGA

Mr. Vijay P. Rahangdale
Research Scholar,
Gondwana University
ADM Bharsingi

Dr. Rajeshwar D. Rahangdale
Research Guide,
Gondwana University
Head Department of Economics
Rashtrasant Tukdoji College, Chimur

Abstract

In 2005, the Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) was established to ensure that people living in rural areas would have access to stable employment. The program's stated goal is to improve rural residents' ability to provide for themselves by mandating that all adults in the area who are willing to perform unskilled manual labor for government projects receive at least 100 days of paid employment per fiscal year. It's the biggest social welfare programme in the world, reaching all 626 districts and helping 41 million households. Researchers are interested in determining the extent to which MGNREGA contributes to the formation of assets, the preservation of natural resources, and the implementation of the Jal Jeevan Hariyali project in the villages of Wadad, Khamari, Pipariya, and Kularbhani in the Gondia district.

Key Word : Social, Welfare, Employment, Natural Resources, Jal Jeevan Hariyali


PRINCIPAL
VINODBABU DESHMUKH MAHAVIDYALAYA
GONDIA DIST. M.P.



The contribution of MGNREGA to employment creation in Gondia District during the COVID-19 pandemic

Mr. Vijay P Rahangdale

Research Scholar, Gondwana University, Gadchiroli

Assistant Prof. & Head, Dept. of Economics,

A.D.M Bharsingi, Dist. Nagpur

Email: vpr1985@gmail.com, Mob.No.8805071165

Abstract :

With the knowledge gained from the COVID-19-induced statewide shutdown, the MGNREGA's vital significance as a lifesaver for something like the working poor in rural India has been demonstrated once again. Everyone can plainly see the great contribution made by the MGNREGA's to prevent millions of people from being hungry, starving to death, and living in abject poverty. Reports indicate that the programme not only assisted the unskilled labour population, but also gave relief to graduates and professionals who had lost their employment in the metropolis and returned to the countryside. The programme ended up being the primary source of income for millions of migrant laborers and other employees in rural India, providing much-needed daily salaries and sustenance for those individuals. Researchers seek to examine how MGNREGA has affected the creation of jobs in certain blocks of the Gondia district.

Key Word: COVID-19, hungry, poverty, population, labour, migrant laborers

1. Introduction :

1.1. Major Initiatives under MGNREGA:

The Ministry of Rural Development introduced MGNREGA, one of the biggest employment guarantee programs in the world, in 2005. The scheme's main goal is to provide adults living in rural households who are willing to do unskilled manual labour for the public good with 100 days of guaranteed employment per

fiscal year. 15.4 crore people are MGNREGA-eligible employees as of 2022-2023. The legislation, in contrast to prior job guarantee programs, intends to address the causes of persistent poverty using a rights-based approach. Women must make up at least one-third of the recipients. The Minimum Pay Act of 1948 established statutory minimum wages for agricultural laborers in the state, and these wages must be paid.

1.2. Implementation Status

During the financial year 2006-2007, the programme was implemented in 200 districts, while during the financial year 2007-2008, it was implemented in 130 districts. NREGA was extended to include the whole of the country's rural areas in April of 2008, at which point it covered all 34 states and union territories, 614 districts, 6,096 blocks, and 2.65 lakh gramme panchayat. During the 2015-2016 fiscal year, the plan has expanded its reach to include 648 districts, 6,849 blocks, and 2,50,441 village panchayats.

2. Objective

1. To evaluate the number of households and persondays produced under MGNREGA in the Gondia District before and after the covid pandemic.
2. To assess the workers engaged in the Gondia District under the MGNREGA in different labour categories both before and after the covid epidemic.

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BHARSINGI, DIST. NAGPUR



Exploring Gender Inequalities, Regional Divergences, and Wage Fluctuations in the MGNREGA Workforce: An In-Depth Analysis of Gondia District

Mr. Vijay P. Rahangdale

Research Scholar,
Gondwana University, Gadchiroli
Dr. B. A.A.C. & S College Bharambpuri
Asst. Prof. Dept. of Eco. A.D.M Bharsingi
Email ID :vpr1985 @ gmail.com

Dr. Rajeshwar D. Rahangdale

Research Guide,
Gondwana University, Gadchiroli
Rashtrasant Tukdoji College, Chimur
Email: rajeshwar.rahangdale@gmail.com

Abstract:

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a critical social welfare program implemented by the Indian Government in 2005, targeting poverty alleviation and employment generation in rural areas. This study examines the role of MGNREGA in promoting gender equity, social inclusion, and empowerment of marginalized groups in Gondia district, Maharashtra. Using a mixed-methods research approach, the study aims to contribute to the understanding of the program's impact on vulnerable populations and inform policy development. Findings suggest that MGNREGA has been successful in ensuring equal pay for equal work and promoting social inclusion for marginalized communities. However, challenges such as inadequate awareness, bureaucratic hurdles, and social norms limit the program's effectiveness. Recommendations include addressing gender disparities, promoting female participation, fostering inclusivity, monitoring and evaluation, and investigating wage fluctuations to enhance the program's outcomes and create a more equitable workforce.

Key Word: MGNREGA, gender equity, social inclusion, empowerment, marginalized groups, Gondia district

1. Introduction:

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is a landmark social welfare program initiated by the Government of India in 2005, aimed at providing guaranteed employment opportunities for rural households while addressing poverty and unemployment. The program seeks to achieve its objectives by generating wage employment for the rural poor through the creation of productive assets in rural areas, such as roads, water conservation structures, and agricultural infrastructure. In addition to its primary goals, MGNREGA has the potential to play a crucial role in promoting gender equity, social inclusion, and empowerment of marginalized groups, given its emphasis on inclusive participation, equal wages, and skill development.

Gondia district, located in the state of Maharashtra, is characterized by a predominantly rural population, agricultural-based economy, and a significant presence of socially marginalized communities, including Scheduled Castes (SC) and Scheduled Tribes (ST). In this context, the effective implementation of MGNREGA has the potential to bring about significant positive changes in the socio-economic landscape of the district. This study aims to examine the role of MGNREGA in promoting gender equity, social inclusion, and empowerment of marginalized groups in Gondia

PRINCIPAL
ARVINDBABU DESHMUKH MAHAVIDYALAY
BHARSINGI, DIST. NAGPUR



(2022-23) (PW)

संशोधक

WEB-BASED LIBRARY SERVICES IN DIFFERENT SECTIONS OF ACADEMIC LIBRARY: AN OVERVIEW

Mr. Pravin U. Wasu

Research Scholar
Librarian, Arvindbabu Deshmukh
Mahavidyalaya Bharsingi,
Tah. Narkhed Dist. Nagpur 441301.
E-mail- admlibrarian7@gmail.com
Mob- 9423108264

Dr. Devendra S. Bhongade

Principal,
Jeevan Vikas Mahavidyalaya,
Devgram, Tah. Narkhed
Dist. Nagpur 441301.
E-mail- devendra.bhongade@gmail.com
Mob-9823421427

Abstract :

The present paper looks at the web-based library services provided by academic libraries in different sections. The purpose of the study was to learn what type of web-based library services were used in academic libraries in different sections and how they were used. Library and information services in 21st century are drastically changed with the recent developments in the technologies like web. The traditional library services are now moving to Web based library services. In the Internet revolution era, Internet, is playing a vital role where every individual accessing their required information on their hands. By applying these Web technologies in libraries provide Web-based Library and information services to their users around the clock on Web.

Key Words: Web Based Library Services, Web Resources, Internet, Web OPAC, website, Library services.

Introduction :

An academic library is a library that is attached to a higher education institution which serves two complementary purposes to support the curriculum and the research of the university faculty and students. An academic library has proved to be an important part of an educational institution, which help students in expanding

their horizon of knowledge. Being a service centre within an educational institution it is necessary to satisfy each and every library user by providing quality services. Quality improvement is a continue process, and library staff needs to evaluate library services regularly in terms of user's satisfaction. The basic objective of an academic library is to satisfy academic community with the resources available at any point of time. Today the information communication technology allows us to know the largest developments in every field, by sitting in our own place. The World Wide Web, which is an information super highway, facilitates us to dig the information in every field of knowledge. The development and application of new technology, especially the Internet and web technologies have significantly changed the traditional methods of offering library and information services in the academic Libraries. The Internet continuously offers news ways and techniques for libraries to offer their services. Today, traditional library and information services have transformed themselves into web-based services using web technologies. In today's libraries, library websites play an important role to present the library to the outside world and serve as a delivery mechanism for a library's Online collection. Web based library services means, library services

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पुरवणी अंक १ - जून २०२३

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BHARSINGI, DIST. NAGPUR

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Author affiliations:

Department of Chemistry, Jawaharlal Nehru Arts, Commerce and Science College, Wadi, Nagpur-440023, India

[✉]To whom correspondence to be addressed:

E-mail: rajwanare@rediffmail.com

Available online at: <http://ajomc.asianpubs.org>

ARTICLE

Design, Synthesis and Evaluation of Novel Thiopyrimidine-Glucuronide Compounds with Promising Biological Activities

Rajendra K. Wanare[✉]

ABSTRACT

3-Methyl-5-acetyl-7-[(2-sulfanylidene-6-aryl-1,2-dihydropyrimidin-4-yl)amino]-1,2-benzisoxazoles (**2a-n**) were obtained from *N*-(5-acetyl-3-methyl-1,2-benzoxazol-7-yl)-3-arylprop-2-enamides (**1a-n**) and thiourea. Products (**2a-n**) oxidized with KMnO_4 to afford 5-acetyl-7-[(2-sulfanylidene-6-aryl-1,2-dihydropyrimidin-4-yl)amino]-1,2-benzisoxazole-3-carboxylic acids (**3a-n**). Reaction of **3a-n** with D-gluconic acid and pyridine yielded β -D-glucuronosyl-5-acetyl-7-[(2-sulfanylidene-6-aryl-1,2-dihydropyrimidin-4-yl)amino]-1,2-benzisoxazol-3-carboxylates (**4a-n**). The present synthesis featured the construction of dihydropyrimidine skeleton through ring closure of key intermediates and installation of pyrimidine ring with amino group. The structures of all the newly synthesized compounds were characterized by analytical data, IR, ^1H NMR and mass spectrometry.


KEYWORDS

1,2-Benzisoxazoles, Thiopyrimidines, β -D-Glucuronides.

INTRODUCTION

The β -D-glucuronides are the conjugation products of aglycone possessing carboxylic group with glucuronic acid and formation of glucuronides is the principal conjugation reaction in the body. The same pathway is used by many drugs that contain hydroxyl, amino, carboxyl, thiol and phenolic groups. Glucuronidation is considered to be a detoxification process or a defense mechanism that helps humans remove unwanted substances including endogenous substances *e.g.*, bilirubin, drugs *e.g.*, SN-38 and other xenobiotics *e.g.*, environmental toxins from the body. Compounds with relatively low molecular weights are almost completely excreted in urine, whereas those with high molecular weights are eliminated almost entirely in bile. It is important pharmacophore in the field of medicinal chemistry and possesses gamut of biologically activities such as polar and chemically reactive metabolites [1]. They form covalent adduct with protein, generating increasing interest as potential hypersensitive mediator and profound effect on drug metabolism [2-6].

Heterocyclic compounds, bearing pyrimidine scaffold, are known for exhibiting interesting biological activities, such as bactericidal, fungicidal, anti-amoebic, antioxidant, anticancer and anti-inflammatory agents [7,8]. Some of the pyrimidine and fused heterocyclic pyrimidine derivatives have provided to be active antiviral and analgesic activities. Recently, we have


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ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST. NAGPUR

Stability Constant Determination of Substituted Thiopyrimidine Glucosides with Ni(II), Cu(II) and Zn(II)

R. R. Tayade^{1*}, R. K. Wanare², A. A. Sukhadeve³, R. G. Mahakale⁴

¹Department of Chemistry, Institute of Science College, Nagpur (MS) India

²Jawaharlal Nehru Arts, Commerce and Science College, Wadi, Nagpur (MS) India

³Department of Chemistry, Institute of Forensic Science College, Nagpur (MS) India

⁴R. S. Bidkar College, Hanganghat, Wardha, (MS), India

*Corresponding author: rrtchem@gmail.com, rajwanare@rediffmail.com

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Abstract Substituted thiopyrimidine glucosides are of great biological importance, but their metal-binding properties with biologically-relevant metal ions are not well investigated. Stability constants of the substituted thiopyrimidine glucosides with Ni(II), Cu(II) and Zn(II) metal were determined by pH-metric titration. Substituted Thiopyrimidine Glucosides drugs are synthesized by reported method. The physic-chemical study of substituted thiopyrimidine carried out by pH-metric method by considering their interaction with Ni(II), Cu(II) and Zn(II) metal ions at 0.1 M ionic strength in 70 % DMF-water mixture by Bjerrum method as adopted by Calvin and Wilson. This study is useful to understand type of complex formation between transition metal ion and thiopyrimine glucosides drugs (L_1 and L_2). Present work deals with determination and comparison of stability constant.

Keywords: substituted thiopyrimidines, stability constants (pK), pH-metry

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1. Introduction

In medicinal chemistry thiopyrimidine derivative are very well known for their therapeutic applications. Many thiopyrimidine derivatives have been developed as chemotherapeutic agents are widely used. A survey of literature has shown that compounds have antiviral, antibacterial [1], antimalarial [2], antihypertensive [3] and anti-inflammatory activities [4]. Glucosides are the water soluble and widely distributed in plants and animals. The important role of glucoside is to increase the water solubility of organic compounds and decrease toxicity of aglycone moieties. They have been increasing antitumor and metabolic activities. Glucosylation reaction is the key reaction for the synthesis of many carbohydrate based biomolecules, oligosaccharides, complex carbohydrate conjugates and many complex glucosides. They serve as a handle of pharmacophoric group for recognition of the structure by target cells and acts as a main carrier of the aglycone moiety.

In glucosides, the noncarbohydrate moiety attached to the sugar molecule is the aglycone, hence glucosides composed of a sugar residue attached to aglycone moiety [5,6]. Many glucosides are used as sweeteners, food additives, non-ionic surfactants, antibiotics in pharmaceutical preparations, artificial primers for glycogen biosynthesis

and cosmetics [7,8,9]. Aglycone moieties attached to glucose shows profound effects such as anticancer, cytotoxicity, antitumor, anti-inflammatory, antioxidant, antiviral, antifungal, antimicrobial, molluscicidal, anti-hypercholesteremic and as a plant growth stimulant activities have been reported for steroidal glycosides. The sulphur analogues of alcohols are thiols which bears the -SH group and important functional groups which have been studied for two main reasons those of biological interest. Firstly it is very reactive towards free radicals and dominant role in biological processes and secondly, it gave considerable protection against the harmful effects of ionizing radiation and immense importance in drug metabolism. Thiopyrimidines glucosides of higher molecular weight are often trace constituents of natural flavours, the lower molecular weight have violently disagreeable odour and widely used abroad for the treatment of the emergency of thyroid storm. Mixed metal complexes play vital role in various biological systems [10] and in different fields of chemistry [11]. Hence, the stability and reactivity of these complexes have been an active field of research [12]. Due to growing interest in the use of sulphur containing compounds in analytical as well as structural studies of metal complexes, sulphur containing substituted thiopyrimidine glucosides drugs are taken in present study. The significance of these thiopyrimidine glucosides enhanced by the fact that it

(2022-23) (S.C) + (S.B)

Socioeconomic Importance of Organic Farming- A Review

S. P. Gudadhe, S. R. Bansod

Department of Botany,
Arvindbabu Deshmukh Mahavidyalaya,
Bharsingi, Tha-Narkhed, Dist-Nagpur

Abstract:

Organic farming is different from the conventional farming in various ways. The use of natural waste, manure, plants waste and biofertilizers instead of hazardous chemical fertilizers is the prime method of yield production through organic farming. The important thing in case of organic farming that this method maintained the soil fertility, quality of underground water and also ecofriendly environment. Due to the use of all the natural waste for farming the yield is also healthy and can be used as a safe food. Commercially there is also the high demand of the society for organic food and organic product due the absence of harmful chemical agents. There are many socioeconomic benefits through the organic farming instead of conventional method of agriculture. This paper attempts to explore some research findings focusing on the economic importance as well as environmental benefits to the society.

Keywords: Organic Farming, Socioeconomic importance and Future trends

Introduction:

Organic farming is based on the use of natural products and supply of organic products free from chemical fertilizers to the society. In case of the climatic factor Compared to conventional agriculture, organic agriculture is reported to be more efficient and effective both in reducing GHGs (CO₂, CH₄ and N₂O) emission mainly due to the less use of chemical fertilizers and fossil fuel. Organic agriculture also reported to be climate change resilience farming systems as it promotes the proper management of soil, water, biodiversity and local knowledge there by acting as a good option for adaptation to climate change. (Khana R.C. 2009). The main focus in case of organic farming is its impacts on plant production, insect, disease and weed dynamics, soil properties and microbial flora in farming systems and physically on forestry, water resources, biodiversity, human health and finally ecosystems. Chemical based agriculture effects ecosystem, responsible for destroying natural resources, reduced food quality, forced for change in microbial flora, disintegrated food safety and other major issues. According to society demand the practice for production of organic food and other products increasing day by day. Along with human being all flora and flora also face the adverse effects due to the use of high chemical fertilizers. Therefore, its need to aware the farmers and stakeholders to control the use and production of chemical-based products and try to fulfil the demand of organic products. Nowadays, as a result of

Socioeconomic Importance of Organic Farming- A Review

S. P. Gudadhe, S. R. Bansod

Department of Botany,
Arvindbabu Deshmukh Mahavidyalaya,
Bharsingi, Tha-Narkhed, Dist-Nagpur

Abstract:

Organic farming is different from the conventional farming in various ways. The use of natural waste, manure, plants waste and biofertilizers instead of hazardous chemical fertilizers is the prime method of yield production through organic farming. The important thing in case of organic farming that this method maintained the soil fertility, quality of underground water and also ecofriendly environment. Due to the use of all the natural waste for farming the yield is also healthy and can be used as a safe food. Commercially there is also the high demand of the society for organic food and organic product due the absence of harmful chemical agents. There are many socioeconomic benefits through the organic farming instead of conventional method of agriculture. This paper attempts to explore some research findings focusing on the economic importance as well as environmental benefits to the society.

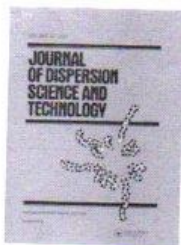
Keywords: Organic Farming, Socioeconomic importance and Future trends

Introduction:

Organic farming is based on the use of natural products and supply of organic products free from chemical fertilizers to the society. In case of the climatic factor Compared to conventional agriculture, organic agriculture is reported to be more efficient and effective both in reducing GHGs (CO₂, CH₄ and N₂O) emission mainly due to the less use of chemical fertilizers and fossil fuel. Organic agriculture also reported to be climate change resilience farming systems as it promotes the proper management of soil, water, biodiversity and local knowledge there by acting as a good option for adaptation to climate change. (Khana R.C. 2009). The main focus in case of organic farming is its impacts on plant production, insect, disease and weed dynamics, soil properties and microbial flora in farming systems and physically on forestry, water resources, biodiversity, human health and finally ecosystems. Chemical based agriculture effects ecosystem, responsible for destroying natural resources, reduced food quality, forced for change in microbial flora, disintegrated food safety and other major issues. According to society demand the practice for production of organic food and other products increasing day by day. Along with human being all flora and fauna also face the adverse effects due to the use of high chemical fertilizers. Therefore, its need to aware the farmers and stakeholders to control the use and production of chemical-based products and try to fulfil the demand of organic products. Nowadays, as a result of

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Investigation of mechanistic interactions between Rifampicin and bovine serum albumin in the presence of different surfactants


Sampat R. Shingda, Parvez S. Ali, Nilesh V. Gandhare, Naziyanaz B. Pathan & Nizamul H. Ansari

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SYNTHESIS, POLAROGRAPHIC AND ANTIMICROBIAL STUDIES OF BENZISOXAZOLYL-N-GLUCOSIDES

Rajendra K. Wanare*¹, Yogesh V. Punatkar², Ravin M. Jugade²

¹Department of Chemistry, Jawaharlal Nehru College, Wadi, Nagpur, India

²Department of Chemistry, Mahatma Jyotiba Phule, Educational Campus, Rashtrasant Tukadoji Maharaj, Nagpur University, Nagpur, India

*Corresponding author: rajwanare@rediffmail.com

ABSTRACT

The desired compounds 7-amino-3-methyl-5-(3'-aryl prop-2'-enyl)-1,2-benzisoxazoles **2a-j** were prepared by the reaction of appropriate 5-acetyl-7-amino-3-methyl-1,2-benzisoxazole **1** with different aromatic aldehydes. The reaction of (**2a-j**) with hydroxylamine hydrochloride was done to form 7-amino-3-methyl-5-(3'-aryl isoxazol-5'-yl)-1,2-benzisoxazoles (**3a-j**). Condensation of tetra-*O*-acetyl- α -D-glucopyranosyl bromide (TAGBr) with 7-amino-3-methyl-5-(3'-aryl isoxazol-5'-yl)-1,2-benzisoxazoles furnishes 7-amino-(β -D-2,3,4,6-tetra-*O*-acetyl glucopyranosyl)-3-methyl-5-(3'-aryl isoxazol-5'-yl)-1,2-benzisoxazoles (**4a-j**) which on deprotection yielded 7-amino-(β -D-glucopyranosyl)-3-methyl-5-(3'-aryl isoxazol-5'-yl)-1,2-benzisoxazoles (**5a-j**). The identities of newly synthesized compounds were established on the basis of IR, ¹HNMR, ¹³CNMR, Mass spectral, Elemental analysis, TLC, and Polarographic studies. All compounds have been evaluated for antimicrobial activities and some compounds show potent activities.

Keywords: 1,2-Benzisoxazole, Amino compounds, N-Glucosides, Polarography.

1. INTRODUCTION

The study of heterocycles is an evergreen field in the branch of organic chemistry and always attracts the attention of scientists working not only in the area of natural products but also in the synthetic organic chemistry. Heterocyclic compounds play an important role in the metabolism of living organism due to their pharmacologically active heterocyclic ring. Heterocyclic ring exhibited chemotherapeutic, antituberculosis and other medicinal uses. Heterocyclic compounds isoxazole, pyrazoles, furans, pyrroles, thiazines, oxazines etc. exhibit diverse pharmacological activities such as anti-fungal, anti-bacterial, antiviral, anti-inflammatory, herbicidal, anticancer, cytotoxic, anaesthetics, and insecticidal [1-10]. Among the wide variety of heterocyclic compounds, isoxazoles are pharmaceutically important molecules and show therapeutic values in the field of medicinal chemistry. Isoxazoles are reported as potent anti-tuberculosis, anti-microbial and antihelmintic agents. Benzisoxazoles are important class of heterocyclic compounds in the field of drugs and widely used as analgesic, anticonvulsant,

antipsychotic and antimicrobial agents [11-15]. They are present in large number of pharmaceutically important products with antitumor, antithrombotic and cholinesterase-inhibiting properties [16, 17]. 1,2-Benzisoxazole derivatives have been found to possess antidepressant, hypotensive, selective inhibitors of the enzyme acetyl cholinesterase, and evaluated as a potential antipsychotic D2/5-HT2 antagonists activities [18, 19]. Chalcones considered as precursors of flavonoids and isoflavonoids, are widely present in edible plants. The presence of α , β -keto functional group in chalcone is responsible for antimicrobial activities. Many chalcones exhibit diverse pharmacological activities like cytotoxic, anti-microbial, antiviral, anti-inflammatory and anaesthetic properties [20-23]. Glucosylation plays an important role in various biological processes such as modification of protein, molecular recognition and immune responses. Addition of carbohydrates in synthetic drugs leads to formation of new hybrid molecule. High level of glucosylation imparts molecular changes that accompany malignant transformations which is a characteristic of cancer cells

Globalization strengthening Language, Literature, Culture and Translations

Mr. Suhas Netaji Morey¹, Mr. Ashish Shamrao Kate²

¹Assistant Professor, Department of English, SPM Science and Gilani Arts Commerce College, Ghatanji
Dist. Yavatmal(MS)

²Arvindbabu Deshmukh Mahavidyalaya Bharsingi Tah Narkhed Dist Nagpur

¹suhasmorey2015@gmail.com ²kateashish4@gmail.com

Abstract:

Language being the key of communication represents a culture and helps an individual in understanding the culture, literature and society. Language explores ceremonies, traditions as well as innumerable other dimensions of the region. Present paper specifically studies language, literature, culture, translation and their impact on globalization and vice versa. Suggesting the threads of culture language tries to mould the society with creating literature, having other existing works translated and brings the world at a glance away. Linguistic culture with attitudes and variations in views can be varied at places; still having an introduction to these cultures with the help of literature and tradition's understanding by getting involved into it, can certainly bring the hearts together. Multiple cultures certainly have different practices to live with, but to broaden our mindset; we have to proofread the various facts of habits and traditions. Globalization introduces everyone to different places with their own language, literature and culture and need of translation also to understand each other better. Society, initially separated by language, class, religion and region, has been brought together in the knot of globalization and shall easily get prosperity of thought and interrelationship.

Keywords: Language, Linguistic Culture, Globalization, Society, Effect

Introduction:

Globalization introducing everyone to the field of expertise with different perspectives, shall definitely indulge everyone in this universe in its universal process. Culture of language and literature correlate the process of human development and the consequences at the other end with same purpose. Language helps the culture to develop and find the meanings in surroundings; it is the ultimate result of interrelation of human society, which comes ahead with need of communication. Our identity which contains our behaviour and thought process has its foundation in our culture, where we were brought up; the language, in which is our mode of expression; our traditions, according to which we behave. Language develops our views and makes a bridge through cultures and societies for joining hands in the process. Positive social uproars can be the result of this; utilization of time and tools in hand needs skill and the collaboration of the culture, language and tradition certainly helps. A language represents specific community but not everyone of the community is using the same language, we being the part of Marathi community do not use the same for conducting business practices or communication with other countrymen. Hence Language, Culture and Traditions have always proved a mode to cope with the other.

Globalization being an inevitable as well as smooth process does not seem to change anything; still the impact which is gradually imprinted on language, culture, literature and translation displays a range of variety. Learning multiple languages for communication is a trend and nearly every student from non-English community favours learning English. Love of mother tongue is strong, still mode of communication provides better understanding globally. Person with cultural strong hold shall never reject the same but shall certainly merge few goods from other; the same is with language even. Language being the mode of expression should always be flexible for accepting new words, trends, traditions from various cultures; at the same time the use of language provides opportunity to mould and construct our interrelations with others. Marginalised feeling alienated culturally can find a way to mainstream, as the Globalization succeeds in connecting the ends of the world far from each other.

Globalization with key concept of influence affected all the Indian languages as India steps towards development. Multiple languages, cultures and traditions being the salient features of Indian society provide a strong base for accepting different cultures in literature and society. Influence of English language, as counted the biggest in globalization is witnessed by us; English has the quality to avail the platform to acquire new knowledge and also to present one's skill on the global scenario. Globalization is an interconnection and makes the whole by connecting languages with behaviour and opportunities to explore. Language comes with changes when used along with another globally on one platform. Widely accepted on global scenario, English plays part of dominant and effective language for communication. Globalization forced the need of one language for interchanging of views and formal interactions widely. It can be taken as threat for other languages, still the need cannot be denied; hence utilization of every opportunity for humanity is needed. Accepting English does not need rejecting other, they go hand in hand

A study on Sources of ancient Indian history

Dr. Prakash D. Pawar

Head Dept. of History, Arvindbabu Deshmukh Mahavidyalaya
Bharsingi, Tah-Narkhed Dist-Nagpur.
Email Id - pdpawar700@gmail.com

Abstract

India is one of the oldest countries in human history. The written history here is 2,500 year old and according to other evidences, India has a human existence and history of 70,000 years ago. History of India has remained glorious and powerful. The Mauryan Empire is one of the most influential and powerful kingdoms in India. The Mauryan Empire, also known as the Gupta Kingdom, was the effective central government in India. Power remained in India for a long time. There is many sources available regarding the history of India, some sources are very reliable and scientific, and others based on assumptions. The main sources of information regarding the history of ancient India can be divided into three parts. These three sources are as Archaeological sources, literary sources, and local sources. In this paper focused on study Sources of ancient Indian history.

Keywords: India, ancient history, sources, Literature.

Preface:

Scholars have traced two major periods of ancient human life: the period in which societies left written information about us is called a history, but there is a much larger period in which calligraphy is unknown. So the information about the society of that time, their life can be obtained only from material remains. This period is called Olden Pragithas. In India, there is another chronology that lies between the two. Writing was known in this period, articles from that period are also available, but the scripts have not yet been read by experts, so the societies and cultures of that time are termed as 'pre-historians'. The term 'India' refers to the entire Indian subcontinent, which includes present-day India, Pakistan, Nepal, Bhutan and Bangladesh. It is important to keep in mind that while learning about prehistory and early history of this vast territory, societies in different parts of the world enjoyed different cultural stages at the same time. They could not relate to each other. Another flaw is that the relations between these prehistoric and prehistoric societies and the societies that appear in traditional history is not known. Vedas, epics, Puranas contain information about many societies. It is not clear where and how the connections between the society and the culture-groups revealed in this written history and archaeological research match. Systematic research on prehistory began in the mid-twentieth century. The correlation is then likely to emerge from further research. At present, however, one has to be satisfied with the information of each and every culture group brought to light by the researchers. This period of prehistory should be about two lakh years. One of the hallmarks of the culture of this period was that it did not know the use of metal and used only wood, bone and mainly stone to meet his daily needs. Therefore, this period can also be called the Stone Age. Some sections of this Stone Age have been observed. Initially, however, it was based on a variety of weapons. Among them are the Paleolithic, Middle Stone Age and Neolithic Age. The Paleolithic again falls into three subdivisions. East, Central and North. Apart from these, the Copper Stone Age is also considered to be a part of prehistory.

Archaeological Sources:

The archaeological sources are related to ancient records, coins, monuments, buildings, sculpture and paintings, these means are quite reliable. With the help of these sources, very accurate information about various human activities of ancient times is available. From these sources, knowledge of the living art, lifestyle and economy of the people present at a particular time is given. Most of these sources can be scientifically verified. Inventors who study such ancient sources are called archaeologists.

Inscriptions

In relation to Indian history, the place of records is very important. A lot of important information has been received about Indian history from the records of many rulers of ancient times. These inscriptions have been found engraved on stones, pillars, metal strips and earthen objects. The study of these ancient records is called epigraphy, while the study of the script of these records is called epigraphy whereas the study of records is called Epigraphy. The inscriptions were generally used by the rulers to disseminate their orders. These inscriptions are usually found on places or objects with a solid surface, they are written on solid surfaces to make them indelible for a long time. Such inscriptions are found on temple walls, pillars, stupas, seals and copper plates etc. These inscriptions have been written in different languages, the major languages of which are Sanskrit, Pali and Sanskrit, many inscriptions have been received in major languages of South India too. The oldest records regarding the history of India have been received from the Indus Valley Civilization, these records date back to 2500 BC on average. As the script of Indus Valley



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Author affiliations:

¹Department of Chemistry, Jawaharlal Nehru College, Wadi, Nagpur-440023, India

²Department of Chemistry, Mahatma Jyotiba Phule, Educational Campus, Rashtrasant, Tukadoji Maharaj Nagpur University, Nagpur-440033, India

[✉]To whom correspondence to be addressed:

E-mail: rajwanare@rediffmail.com

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(R.K.W)

2021-22

ARTICLE

Synthesis, Glucosylation and Polarographic Studies of Benzofused Pyrimidine Derivatives

Rajendra K. Wanare^{1,✉}, Yogesh V. Punatkar²
and Ravin M. Jugade²

ABSTRACT

7-Amino-3-methyl-5-(3'-aryl prop-2'-enyl)-1,2-benzisoxazoles (**2a-j**) were synthesized by the condensation of 5-acetyl-7-amino-3-methyl-1,2-benzisoxazole (**1**) with aldehydes. The reaction of products **2a-j** with urea produced 7-amino-3-methyl-5-(4'-aryl-2'-pyrimidin-6'-yl)-1,2-benzisoxazole derivatives (**3a-j**). Glucosylation of **3a-j** with 2,3,4,6-tetra-*O*-acetyl glucopyranosyl bromide (TAGBr) and tetrabutylammonium bromide (TBAB) gives corresponding glucosylated 7-amino-(β-D-2,3,4,6-tetra-*O*-acetyl glucopyranosyl)-3-methyl-5-(4'-aryl-2'-pyrimidin-6'-yl)-1,2-benzisoxazoles (**4a-j**). Glucosylated compounds **4a-j** on deacetylation gives target products 7-amino-(β-D-glucopyranosyl)-3-methyl-5-(4'-aryl-2'-pyrimidin-6'-yl)-1,2-benzisoxazoles (**5a-j**). Glucosylation and deacetylation reaction carried out by Kneigs-Knorr reaction. All the synthesized products were characterized by elemental analysis, IR, ¹H NMR, ¹³C NMR and mass spectroscopy. The biological and electrochemical activities of all the synthesized compounds were also examined.

KEYWORDS

Benzisoxazoles, Pyrimidines, Urea, *N*-Glucosides, Electrochemistry.

INTRODUCTION

Pyrimidine was first prepared by conversion of barbituric acid to 2,4,6-trichloropyrimidine followed by reduction using zinc dust in hot water [1]. The preparation of pyrimidines by barbituric acid from urea and malonic acid in the presence of phosphorus oxychloride [2]. The first synthesized derivative of pyrimidines was reared by condensing ethyl acetoacetate with amidines. Many pyrimidine derivatives have been developed as chemotherapeutics and exhibiting remarkable pharmacological activities [3]. Many heterocyclic compounds occurred in natural products. Hydrolysis of nucleic acid produces several pyrimidines viz. uracil, thymine and cytosine. Pyrimidine base shows activities due to presence in uracil, thymine and cytosine, which are essential building blocks in nucleic acid, DNA and RNA. Cytosine is present in both DNA and RNA, while uracil present in RNA and thymine in DNA [4]. Vitamins are essential for life and pyrimidine ring is found in vitamins like riboflavin, thiamine and folic acid [5]. It is also found in many synthetic compounds such as barbiturates and HIV drug, zidovudine and stavudine. Pyrimidine nucleus is present in barbituric acid and its derivatives, veranal and luminal, which are used as hypnotics [6]. 5-Alkylated pyrimidinetrinitrones have been


DR. R. K. WANARE

2020-2021

FULL PAPER

In vitro Binding Interaction of Isoxazoline Derivative with BSA: Equilibrium, FT-IR, Acoustical and Molecular Modeling Study

Ajay Madhukarrao Pisudde, Pradip Vitthalrao Tekade*, Shrikant Bandupant Thakare

Department of Chemistry, Jankidevi Bajaj College of Science, Jamnalal Bajaj Marg, Civil Lines, Wardha- 442001, M. S., India.

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Abstract:

The present study showed the binding interaction of 2-(4,5-Dihydro-1,2-oxazol-5-yl)-phenol-*N*-methylaniline (2DHOPNA) with BSA in 1,4-dioxane, DMSO and DMF by equilibrium dialysis, FT-IR, acoustical at physiological pH and its molecular modeling study. Findings were interpreted by scatchard plot which showed an increase in association constants with increasing temperature and concentrations of the 2DHOPNA. It is seen that the binding supposed to be more significant in 1,4-dioxane than DMSO and DMF. Thermodynamic parameters are also determined for the binding interaction of 2DHOPNA with BSA. Values of Gibb's free energy (ΔG), enthalpy (ΔH) and entropy (ΔS) were calculated by using van't Hoff equation. The positive values of ΔH and ΔS showed exothermic interaction between 2DHOPNA and BSA. Similarly, negative ΔG showed the spontaneity of the binding process. ΔG becomes more negative with increase in temperature, indicated feasibility of the binding interaction at high temperature. Molecular modeling confirmed the binding interaction having energy of -210.13.

Keywords: equilibrium dialysis; FT-IR; scatchard analysis; association constants; BSA; thermodynamic parameters

1. Introduction

2-(4,5-Dihydro-1,2-oxazol-5-yl)-phenol-*N*-methylaniline (1, 2DHOPNA, Figure 1) is an important heterocyclic compounds shows various biological properties especially, herbicidal [1], antioxidant [2], antifungal [3], antibacterial [4], analgesic and antimicrobial [5] and anti-cancer properties [6]. Human serum albumin (HSA) is the most abundant protein in blood serum with the concentration of 0.63 mM. It is single polypeptide chain of 585 amino acids with a large helical triple domain structure that forms heart shaped molecule. Serum albumins are the most abundant proteins in the circulatory system of wide variety of organisms, being the major macromolecules contributing to the osmotic blood pressure [7]. A variation in temperature is found to be a key factor in binding affinities of HSA [8]. It is difficult to obtain HSA for

experimental purposes. HSA and BSA exhibit similar chemical properties due to high percentage of sequence identities. BSA in lieu of HSA is used in this study because of low cost and easy availability. Various techniques are available to monitor the binding interactions of ligands to protein like U.V. visible absorbance [9], isothermal titration calorimetry [10], fluorescence [11], NMR [12], equilibrium and FT-IR spectroscopy [13]. These techniques are used to study the binding interaction of the various drugs with protein such as Phenformin [14], Ligustrazine [15], aspirin and vitamin C [16], Ciprofloxacin [17] and methotrexate [18]. Molecular modeling study is also an important aspect towards protein-drug interaction [19-20].

Present study proposed to evaluate the effect of ligand concentration, temperature, and polar/nonpolar solvent on binding interaction of 2DHOPNA with BSA at physiological pH. The

*Corresponding author. E-mail: pradiptekade@gmail.com

सामाजिक न्याय और मानवाधिकार

डॉ० प्रकाश घनश्याम

शोध सारांश

21 वीं सदी से हमारी अपेक्षाएं और आशाएं जो भी हों, मानवता आज संक्रमण के एक भयावह दौर से गुजर रही है। संभावनाओं के प्रति पूरी तरह आशावाद होना अपने आप को धोखे में रखना होगा। पहला संकट तो मानव जाति के भौतिक अस्तित्व का है और वह आज अपनी समस्त उपलब्धियों को आठ से 10 बार विनिष्ट कर सकता है। जातीय और धार्मिक प्रेरणा से जन्मे अन्धकार की विभीषिका भी दिल दहला देने वाली है। खाद्य सुरक्षा प्रश्नों के घेरे में है। हरित क्रांति की सीमाएं हैं और वह जनसंख्या के दिक्कतों के लिए बहुत अधिक समय तक संसाधन नहीं जुटा पाएगी। पर्यावरण प्रदूषण बड़ी तेज गति से बढ़ रहा है और परिस्थिति का संतुलन तोड़ने की तरह गड़बड़ा गया है। ऊर्जा के स्रोत सूख रहे हैं और उसका कोई सार्थक विकल्प अब तक केवल संभावना है, मानव की आकांक्षाओं की क्षितीजों का असीम विस्तार हो रहा है, किंतु ज्ञान विज्ञान और संसाधनों के असमान वितरण से उस की आंशिक पूर्ति भी नहीं हो पा रही। प्रस्तुत शोधपत्र में मानवाधिकार तहत सामाजिक न्याय का परिचय इस संदर्भ में विचार व्यक्त किये हैं।

Keywords: मानवाधिकार, समता, सामाजिक न्याय

प्रस्तावना

सामाजिक विकास की अवधारणा को मानवीय आवश्यकताओं और उनके अनुकूल मूल्यों से जोड़कर समझा जा सकता है। सामाजिक विकास का वर्गीकरण डॉ. श्यामाचरण मुखर्जी द्वारा किया गया है। इनमें से प्रत्येक की पूर्ति के लिए सामाजिक अंतर अंग्रेजित है। पहले वर्ग में भी आवश्यकता होती है कि मानव का अस्तित्व आश्रित है। पोषण, आश्रय, रक्षा, राजगार, निवारक और निरोगकारी चिकित्सा तथा व्यक्ति और संपत्ति की सुरक्षा, सामाजिक धरातल पर इन आवश्यकताओं की पूर्ति के लिए अनेक कदम आवश्यक है। प्राथमिकता के आधार पर सार्वजनिक खाद्य व्यवस्था, शुद्ध पेयजल वितरण और गरीब तबके के लिए गृह निर्माण और सस्ते वस्त्र विक्रय का प्रबंध विकास योजनाओं का विकास होगा, राज्य कानूनी और व्यवस्था के लिए पुलिस की नियुक्ति और उसके कार्यों पर नियंत्रण के लिए उतरदाई होगा, जीविका उपार्जन के साधन जुटाना भी नियोजन का उद्देश्य होगा, स्वास्थ्य एवं शिक्षा की व्यवस्था का तथा पर्यावरण का प्रबंधन इस वर्ग की कार्यसूची के अन्य मुद्दे होंगे। दूसरे वर्ग में समाज की आवश्यकता है आती है। इनके अंतर्गत जीवनक्षम समुदाय का निर्माण, सामुदायिक भावना तथा सलांगी समाज का विकास, सामाजिक सहमति, संघर्ष का नियंत्रण और पर्यावरण तथा सामाजिक अनुशासन के प्रति मानव की स्वीकृति

आते हैं। सामाजिक निर्णय और उपक्रमों में सहभागिता संभावना का विकास तथा उपलब्धियों के लिए सामाजिक मान्यता तथा पुरस्कार की गणना भी इसी श्रेणी में की जा सकती है - सांस्कृतिक और मनोवैज्ञानिक आवश्यकताओं का। इन के मुख्य विदु है व्यक्तिगत स्वाधीनता, आत्मनिर्भरता, अयकाश तथा उसका रचनात्मक उपयोग और उन्नति के उपलब्धियों के पर्याप्त अवसर, सांस्कृतिक तथा धार्मिक संरक्षण का विकास भी इसी वर्ग में आता है, चौथे वर्ग में मनोवैज्ञानिक कल्याण से जुड़ी आवश्यकताओं का समावेश किया जा सकता है। कमजोर, अपंग, विकलांग और सूभेद्य समूह की सुरक्षा के लिए योजनाबद्ध प्रयत्न होना चाहिए। वंचित और दलित समुदायों को प्रति बरती जाने वाली विभेदक नीतियों की समाप्ति भी आवश्यक है। पाचवा वर्ग अनुकूलन की आवश्यकताओं का है। इनके अंतर्गत जो कार्यक्रम आएंगे वह हैं, सामाजिक, सांस्कृतिक और मनोवैज्ञानिक पर्यावरण में आ रहे परिवर्तनों का आकलन और उनमें संबंध अनुकूलन की दिशा और गति का निर्देश देना, मनोवैज्ञानिक चेतना का विकास-विस्तार करने वाली शिक्षा, अनुकूलन के वातावरण तैयार करने वाली सक्षम संचार नीतियों और उचित चेतना की व्यवस्था जिससे समाज आगे आने वाले संकटों के संघातों के लिए अपने आपको तैयार कर सके, मनोवैज्ञानिक आवश्यकताओं का छटा और अंतिम वर्ग है- प्रगति

* इतिहास विभाग प्रमुख - अरविदाबू, देशमुख महाविद्यालय भारसिंगी, जिला नागपुर

अस्पृश्यता निवारण हेतु म. गांधी के विचार
और कार्य - एक ऐतिहासिक अध्ययन

शोध सारांश

भारत में दलित शब्द और उसका चलन भारत में अंग्रेजी राज की स्थापना के बाद में हुआ। डॉ. आम्बेडकर ने दलित शब्द का प्रयोग उन समूहों के लिए किया जो भारत की सामाजिक संरचना में अपने स्थान व निर्धारित भूमिकाओं के कारण स्वतंत्रता के समय मूल्यों का उपयोग करने में असमर्थ थे। इसमें शूद्र वर्ण के अन्तर्गत आनेवाली जातियाँ, वर्ण व्यवस्था से बाहर की जातियाँ और हिन्दू शामिल थीं। लेकिन यह शब्द रूढ़ हुआ उन जातियों पर जाकर जिनसे समाज में छुआछूत का व्यवहार होता था या जो अस्पृश्यता का शिकार होती थीं। आम्बेडकर के प्रयासों के काल में राष्ट्रवाद की संकल्पना का आत्मसात कर भारतीय राष्ट्रवाद को जन्म देने हुए अस्पृश्यता में संलग्न महात्मा गांधी राष्ट्रीय क्षितिज पर नेतृत्व के रूप में प्रतिष्ठित हो रहे थे। उत्तर भारत में आर्य समाज के कार्यकर्ता ने अस्पृश्यता को जिन्हें आम्बेडकर का दलित शब्द अपने में शामिल करता था, उन्हें जनेऊ धारण कराकर, संस्कृत पदों से अस्पृश्यता को उनकी सामाजिक हैसियत को बदला जा रहा था। इसी उत्तर भारत में महात्मा गांधी ने उक्त जातियों को हरिजन कहकर अस्पृश्यता को दूर किया। प्रस्तुत शोधपत्र में अस्पृश्यता निवारण हेतु म. गांधी के विचार और कार्य पर चर्चा कि गयी है।

Keywords: महात्मा गांधी, अस्पृश्यता, दलित, जाती-व्यवस्था

प्रस्तावना

महात्मा गांधी ने स्वराज्य प्राप्ति के लिए जो अपने रचनात्मक कार्यक्रम प्रस्तुत किये उसमें इन्होंने कौमी एकता (हिन्दू-मुस्लिम एकता) के बाद दूसरा दर्जा अस्पृश्यता निवारण को दिया। इस सम्बन्ध में उनके आशय का सार उनके वक्तव्य के निम्न अंश से समझा जा सकता है - "ऐसा कौन है जो आज इस बात से इनकार करेगा कि हमारे हरिजन भाई-बहनों को बाकी के हिन्दू अपने से दूर रखते हैं और इसकी वजह से हरिजनों को जिस भयावनी व राक्षसी अलहदगी का सामना करना पड़ता है उसकी मिसाल तो दुनिया में कहीं ढूँढे भी नहीं मिलेगी? यह काम कितना मुश्किल है, सो मैं अपने अनुभव से जानता हूँ, लेकिन स्वराज्य की इमारत को उठाने का जो काम हमने हाथ में लिया है उसी का यह एक हिस्सा है।" महात्मा गांधी ने दलित प्रश्न को अपने स्वराज्य के संघर्ष का एक महत्वपूर्ण हिस्सा मानकर लगातार यह प्रयास किया कि कांग्रेस कार्यकर्ता इसे सियासी काम न मानकर हिन्दू-धर्म का अनिवार्य काम मान लें और हर हिन्दू के मन व संस्कार में यह कार्य समाहित कर दें, इस सम्बन्ध में वह लिखते हैं- "आज की इस घड़ी में हिन्दू धर्म से छिपटे हुए अस्पृश्यता रूपी शाप और कलंक को धो डालने की आवश्यकता के बारे में विस्तार से कुछ लिखने की जरूरत नहीं। यह सच है

कि इस दशा में कांग्रेस वालों ने बहुत कुछ किया है लेकिन अफसोस के साथ कहना पड़ता है कि ज्यादातर कांग्रेसियों ने अस्पृश्यता निवारण को, जहाँ तक हिन्दुओं का सम्बन्ध है, हिन्दू धर्म की हस्ती के लिये लाजिमी मानने के बजाय सियासी जरूरत की चीज माना है। अगर हिन्दू समाज को समझकर इस काम को उठा लें कि इसी में उनकी सनातनी सनातनी कहे जाने वाले उनके धर्म-बन्धुओं पर विचार आज तक हुआ है, उससे कई गुना ज्यादा उत्तर उनके उनका हृदय-परिवर्तन कर सकेंगे।"

यहाँ यह स्पष्ट है कि गांधी के दृष्टिकोण ने दलित प्रश्न महज सियासी प्रश्न न होकर हिन्दू धर्म को मानकर अत्याधिक परिवर्तन का प्रश्न था। इस प्रकार गांधी का संत परम्परा का बोध कराते हैं क्योंकि जाति-प्रथा पर हुए संत कबीर लिखते हैं-

"जात-प्रथा को माने न कोय, हरि को भजे सो हरि का होय।"

कबीर परम्परा के संत नरसिंह मेहता अनेक अछूतों के लिए 'हरिजन' शब्द का प्रयोग करते थे, जिन्हें अछूतों अपने लिए सही शब्द मानते थे। इसीलिए गांधी दलितों के लिए हरिजन शब्द का प्रयोग करते हैं।

SYNTHESIS AND BIOLOGICAL APPLICATIONS OF 1, 2-BENZISIXAZOLYL GLUCURONIDES

R.K. Wanare

Jawaharlal Nehru Arts, Commerce and Science College, Wadi, Nagpur, MS, India
rajwanare@rediffmail.com

ABSTRACT

A variety of 1-{3-methyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazol-5-yl}-ethan-1-ones (**4a-k**) were prepared by the condensation of hydroxylamine hydrochloride with various *N*-(5-acetyl-3-methyl-1,2-benzoxazol-7-yl)-3-arylprop-2-enamides (**3a-k**). Oxidation of (**4a-k**) with alkaline $KMnO_4$ solution afforded 5-acetyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazole-3-carboxylic acids (**5a-k**). Glucuronidation of (**5a-k**) with free D-glucuronic acid by using dry pyridine to afford β -D-glucuronosyl-5-acetyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazole-3-carboxylates (**6a-k**). The structure of these compounds has been characterized on the basis of their sophisticated instrumental analysis like FT-IR, 1H -NMR, FAB-MS, elemental analysis and chemical properties. Some compounds showed significant antibacterial activity against *E. coli* and *S. aureus* and moderate to feeble antifungal activity against *A. niger* and *C. albicans*.

Introduction

Continuing my studies about the synthesis of 1,2-benzisoxazoles, chalcones, isoxazoles and glucuronides, herein we describe the synthesis of 1,2-benzisoxazoles, chalcones, isoxazoles and their β -D-glucuronide derivatives. 1,2-Benzisoxazole derivatives have been used as potential anti-inflammatory, analgesic, sedative etc. agents. 1,2-Benzisoxazoles have been used like potential tuberculostearic agents. Several derivatives of 1,2-benzisoxazole have been found to possess antidepressant, hypertensive, anticonvulsant and antifungal properties¹⁻⁴. A large number of chalcones have displayed interesting antineoplastic, diuretic, choleric and antidiabetic properties. Various derivatives show anti-inflammatory, antibacterial, antiviral and gastric protectant activities. It possesses insecticidal, antimicrobial and antipicornovirus activities. Chalcones find applications in industries and some of the chalcones are used as artificial sweeteners. Various chalcones find their applications in photosensitive polymers, produce nematic liquid crystals and as an antioxidant for oils⁵⁻¹¹. Isoxazoles are important class of five-membered heterocycles associated with biological activities. Naturally occurring isoxazoles are used as anti-tuberculosis drug. Isoxazole derivatives involve substances with analgesics and local anaesthetic activity. The activities of isoxazoles include main topics like remarkable antileprosy, psychotherapy,

anabolic, antibacterial, antiviral, anti-inflammatory, antifungal etc. properties¹²⁻¹⁴. β -D-Glucuronides are the conjugation products of compounds possessing a carboxylic acid functional group with free D-glucuronic acid. β -D-Glucuronides are polar and chemically reactive metabolites¹⁵⁻¹⁶. Prompted by above facts some β -D-glucuronide compounds have been synthesized with a view to studying their biological profile.

The desired compounds 1-{3-methyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazol-5-yl}-ethan-1-ones (**4a-k**) were prepared by condensing (**3a-k**) with hydroxylamine hydrochloride in 2% NaOH solution. Similarly, β -D-glucuronosyl-5-acetyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazole-3-carboxylates (**6a-k**) were synthesized by glucuronidation of 5-acetyl-7-[(5-aryl-4,5-dihydro-1,2-oxazol-3-yl)-amino]-1,2-benzoxazole-3-carboxylic acids (**5a-k**) with glucuronic acid. Their structures were established by the spectral studies.

Experimental

Material and Methods

All the starting materials and reagents were obtained from Merk, Aldrich (USA) and Rankem Pvt Ltd (India) and were used without further purification. Melting points were determined in open capillary tubes and are uncorrected. IR spectra were recorded as KBr pellets on Shimadzu-810 IA and Perkin Elmer FTIR spectrometer and only significant

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PHYTOHORMONAL EFFECT ON *in vitro* CALLUS INDUCTION OF *Tinospora cordifolia* (Willd.) Miers.

VIVEK D. SAMARTH*, SURENDRA R. SINKAR, URJA PANDYA AND UMESH P. DHULDHAJ*

Department of Botany, Indira Gandhi Kala Mahavidyalya, Ralegaon, Dist. Yavatmal, Maharashtra, India [VDS].

Department of Botany, Arvindbabu Deshmukh Mahavidyalya, Bharsingi, Dist. Nagpur, Maharashtra, India [SRS].

Department of Microbiology, Gujarat Vidyapith, Sadra, Gandhinagar 382 320 Gujarat, India [UP].
School of Life Sciences, Swami Ramanand Teerth Marathwada University, Nanded 431606, Maharashtra, India [UPD].

[*For Correspondence: E-mail: umeshpd12@gmail.com]

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Short Research Article

ABSTRACT

Tinospora cordifolia is a medicinally important plant and has special place in the Indian therapies of disease treatments hence listed in a prioritized medicinal plant. Because of modern day deforestation and over harvesting of medicinal plants, we need alternate rapid regeneration methods for such medicinally important plants as their seeds are not easily available and dramatic change in the environment because high dose of pollution not easily favors the growth of seedlings. The *in vitro* regeneration technique provide efficient tool for multiplication of plants on large scale. Hence, in this study we attempt to induce callus formation and regenerations of shoot by using leaf bit and shoot tip in MS media amended with different combinations of phyto-hormones. We observed that the combinations of BAP with 2, 4 D shown significant induction of callus with maximum average fresh weight while regeneration of shoot not observed in any combinations of phyto-hormones.

Keywords: *Tinospora cordifolia*; *in vitro*; callus; phytohormone.

INTRODUCTION

Tinospora cordifolia (Willd.) Miers is a climber, most commonly observed in an Asian country like India and has a special role in the medicinal purposes [1] such as in the treatment of ailments like AIDS (HIV), cancer, viral infections, neurological dysfunctions, psychiatric problems and hypertension [2,3]. It is a rich source of secondary metabolites like tinosporin, tinocordiside, cordifolioside, palmetine, isocolumbin, etc. [4,5]. *T. cordifolia* are listed in priority medicinal plants by National Medicinal

Plant Board (NMPB) of Government of India [6,7].

It is an unique plant, having its each plant parts medicinal significance such as stem used in stomach diseases, skin diseases [8,9], blood enrichments, cures jaundice [10]; decoction of leave juices used in fever [11]; roots are used as anti-dote against snake bite and sting of scorpion [12,13,14,15]. Dry barks are used as anti-leprotic [16], anti-allergic [17] and anti-spasmodic [18]. *T. cordifolia* in isolation as well as in combination acts as the very potent drug [19].

PRINCIPAL
ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST. NAGPUR

ROLE OF TEACHER IN NURTURING HIGHER EDUCATION

Prof. Vijay Rahangdale

Assistant Professor

Department of Economics

Arvindbabu Deshmukh Mahavidyalaya, Bharsingi

Email: vpr1985@gmail.com

Abstract

From ancient to modern India, the role of a teacher has always occupied a place of prominence in Indian history. In ancient times universities namely Nalanda, Taxila, and Vikramsila is known for their edifier who attract the student of Burma(now Myanmar), Ceylon(New Shri Lanka), Korea, Nepal, and Tibet countries. Today, India's teacher is the backbone of one of the highest education systems in the world. A teacher needs to become SMART (Simple, Moral, action-oriented, responsive and transparent) for accepting the challenge and adopt the SIMPLE model such as spiritual quotient development, intuition development, mental level development, love oneself attitude development and emotional quotient development. In this research, a paper researcher tries to explain different skills and standards for a teacher who directly comes under in the higher education system of India.

Keywords: SIMPLE, SMART.

Introduction

Education is an ornament in prospective and refuge in adversity (By Aristotle). (Swami Vivekananda) once said that " Take up one idea: make that one idea your life. Think of it , a dream of it, Live on that idea let the brain, muscle, nerves, every part of the body be full of that idea and just leave every idea alone. This is the way to succeed "Teachers can never truly teach without continuously learning. According to (Rabindranath Tagore), "A lamp can never light another lamp unless it continues to burn its flame." A teacher, therefore, has a moral obligation towards his students. The mediocre teacher tells the good teacher explains, the superior teacher demonstrates and the great teacher inspires. (By William A. Ward).



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A Study of Comprehensive Journey on Academic Libraries From Traditional To E-Learning.

Mr. Pravin Wasu

Librarian

Arvindbabu Deshmukh Mahavidyalaya, Bharsingi

E-mail- admlibrarian7@gmail.com

Abstract

Globalization has resulted in many new challenges for present education system, in this digital global world e-learning emerged as one of the fastest moving trends in education. Education and libraries are the two faces of the same coin, and it is really not possible to make a separation between them. Education institute, libraries are regarded as a learning resource centre, so there is great expectation from libraries and library professionals for the successful implementation of e-learning.

Keyword: Academic library, digital library, e-learning, e-resources tool, virtual library.

Introduction

Different terminologies have been use for e-learning term that are commonly used include online learning, internet learning, distributed learning, networked learning, computer-assisted learning, virtual learning, web-based learning and distance learning. All of these terms imply that the learner is at a distance from tutor or instructor. E-learning is a computer-based learning that uses a digital environment for teaching and learning it is new education concept by using the internet technology. E learning is opportunities to develop knowledge and skills in wide range areas, e learning also known as distance learning. In simple words e-learning means learning through internet technology it also concern with digital technology.

The concept of libraries has been changed with the advent of the ICT. Now, a digital library is equipped with storage of digital collections, infrastructure and services to disseminate information for sustain to lifelong learning, protection and preservation of recorded information for intellectual communication are one of the important jobs for library today. Libraries can now integrate visual education with digital learning by a useful merger of the

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BHARSINGI, DIST. NAGPUR

Synthesis and Photoluminescence Study of Ce³⁺ doped CaAl₂S₄ Phosphor

A. R. Gharpure¹, S. P. Wankhede²

¹Department of Physics, ArvindbabuDeshmukh Mahavidyalaya, Bharsingi, India.

²Department of Physics, K.D.K. College of Engineering, Nagpur, 440009, India

Email:-anjali22rr@gmail.com

Abstract-- The synthesis method and photoluminescence properties of Ce³⁺ doped CaAl₂S₄ phosphors for white light emitting diode (LEDs) are reported. Conventionally, thioaluminates (CaAl₂S₄) were prepared by solid state reaction and the evacuated sealed quartz ampoule. Oh et al. [1] prepared CaAl₂S₄ single crystals by a chemical transport reaction method in a closed system using high-purity iodine as a transport agent. These methods are rather tedious, and require special apparatus. We have described a wet chemical co-precipitation procedure for synthesizing Ce³⁺ activated phosphors with strong excitation in nUV region.

This method does not require the H₂S gas flow during synthesis. We successfully prepared CaAl₂S₄:Ce³⁺ powders by this method. Synthesis and photoluminescence characterization of this phosphors are described in this paper.

Keywords--Photoluminescence CaAl₂S₄ phosphors, near-UV LED phosphors, Ce³⁺ activator.

I. INTRODUCTION

Much attention has previously been focused on the preparation method and fundamental information of CaAl₂S₄. Different methods are used for the preparation of CaAl₂S₄ thioaluminate. Le Thi et al [2] prepared thioaluminates powder in silica tubes sealed under vacuum by using alkaline earth sulphides, EuS and Al₂S₃ as a starting materials. Yu et al [3] prepared CaAl₂S₄ phosphors doped with Eu²⁺ and Ce³⁺ by using conventional solid state reaction. Many practical applications have been discussed in the field of optoelectronics devices such as field emission display (FED) and phosphor converted white light emitting diodes (pc-WLED). A conventional method used for the preparation of thioaluminates requires special apparatus and H₂S gas flow during synthesis. Hence we used soft chemical process for the preparation of thioaluminates phosphor. We prepared CaAl₂S₄:Ce³⁺ by using this method successfully. Synthesis and characterization of this phosphor are described in this paper.

II. EXPERIMENTAL

The wet chemical co-precipitation method is used to prepared Cerium doped CaAl₂S₄ phosphor. Calcium chloride, Aluminium chloride, sulphur and hydrazine hydrate are used as starting materials. In this method sulphur is dissolved in aqueous solution of hydrazine hydrate (solution 1). An excess of hydrazine hydrate is used with 2:1 ratio of hydrazine hydrate to sulphur. The stoichiometric amount of calcium chloride is dissolved in water in one beaker. The stoichiometric amount of aluminum chloride is dissolved in water in another beaker. This solution is mixed with solution 1. The



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TEACHING LEARNING EVALUATION IN HIGHER EDUCATION

Mr. Ashish S. Kate

Assistant Professor

Arvindbabu Deshmukh Mahavidyalaya, Bharsingi

Tah. Narkhed, Dist. Nagpur (M.S.)

E-mail: kateashish4@gmail.com

Abstract

Student-centered education through appropriate methodologies facilitates effective learning as teaching-learning modalities of the higher education institution are considered to be relevant for the learner group. Although it is true that diversity of students in respect of their background, abilities and other personal attributes will influence the pace and extent of learning, learner-centered education calls for appropriate methodologies that can be used by professors' to provide a variety of learning experiences, including individual and coordinative learning. In this paper, we have analyzed various strategies followed like planning and preparing the teaching- learning - evaluation schedules, support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students to make learning more student-centric, institutional strategy to nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators, the technologies and facilities available and used by the faculty for effective teaching. Opportunities given to the students and professor to advance the level of knowledge and skills, academic, personal and psycho-social support and guidance services provided to students, details of innovative teaching methods adopted by the faculty during the last four years and the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning are also discussed.

Introduction:

Teaching is one of the main components in educational planning which is a key factor in conducting educational plans. Despite the importance of good teaching, the outcomes are far from ideal. The present qualitative study aimed to investigate effective teaching in higher education. The best teaching approach is the mixed method plus educational planning and previous readiness. But whenever the teachers can teach using this method confront with some barriers and requirements; some of these requirements are prerequisite in professors' behavior


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Ethics and values in higher education

Dr.D.K.Upase

Dept. of English

Arvindbabu Deshmukh Mahavidyalaya

Bharsingi, Tah-Narkhed

Abstract:

In Indian higher education and society, the role of ethical values is declining and requires a new way of thinking. Education opens the doors of the mind, cleanses the soul and helps to self-realization. Colleges and Universities are the bank of knowledge. These Institutions create and distribute the knowledge within a particular society and they are also the gateway to power, significantly affecting the quality of economic and social life in the world. Therefore, these Institutions have moral responsibilities to maintain the wellbeing of that society. Now a day's so many crimes are committed by students coming out of schools and colleges and by well educated people. In India, the education institutions, there is a significant lapse on the concept of human development and nation building process. This lapse has resulted in the decline of values among students. Therefore, it is required to identify the major causes of this decline in ethical values. The best way to address this issue is to impart value based ethical education incorporated in the academic curriculum, just the way it was being practiced in the ancient times where the education system was value-based and education would help in the improvement of human character and recognition of their inner purity. This paper focused on the importance of understanding the roles of ancient Indian values and ethics and their role to shape students, educational institutions, and today's society.

Keywords: Ethical Values, Education, Human Development, Indian Ethics.

Introduction:

Education is a unique quality of mankind. It is very important for the development of the whole mankind and an important weapon for accelerating the well-being and prosperity of the world in all direction. Education is a lifelong process which continues from womb to tomb. Education is a tool for total development of human being; if any one aspect of human personality is ignored, it can result very opposite without involve ethics and moral values in education, human development will be in completed. "Ethics is a branch of Philosophy that deals with the morality; the word ethics has been derived from the Greek word 'ethos' which means character. Aristotle was one the first great Philosophers to define the ethics." If we look at ancient education system of India, we can realize that their education


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ARVINDBABU DESHMUKH MAHAVIDYALAYA
BHARSINGI, DIST. NAGPUR



The challenges and opportunity after lockdown COVID-19

Dr. Prakash D. Pawar*

ABSTRACT

COVID-19 outbreaks have made a massive impact on economies and societies across the world. As Governments and communities tirelessly work towards navigating the challenges created by this pandemic, In order to deal with the crisis caused by this epidemic, it is necessary to supply the needs from the limited available resources and formulate appropriate policies. States have taken up several proactive measures to manage and mitigate the spread of this pandemic. To cope with this crisis in the country and to reduce the impact of this epidemic; human beings must unite, follow the rules and help to restore the country

Keywords- COVID-19, Opportunities, Challenges, Policies

Introduction:

On April 14, the Prime Minister announced a nationwide lockdown to control the COVID-19 pandemic. After all, the number of people reporting positive for Covid-19, the disease caused by the Coronavirus and continued to rise and new knots of infection were emerging around the country. At the same time, it was clear that our pm would free some restrictions to revive a battered economy. Gradually, priority will be given to needy industries in the least affected areas to help them cope with the economic crisis. These relaxations differ according to how a district is classified — a hotspot or one with a few confirmed Covid-19 cases, or with no infections. The lockdown has led to the loss of jobs to the country's poorest people. But the top priority is still containing the spread of the disease. A recent note by investment bank JP Morgan says social distancing rules should not be loose until at least two weeks after evidence of the infection rate has peaked. In the meantime, India needs to ensure that the poor and

non-salaried lower middle class people are prevented from working for long periods can survive. Direct transfers to households may reach most, not all as several numbers of commentators have pointed out. Additionally, the quantum of shipments seems insufficient to see a home over a month.

Many challenges faced in lockdown:

It will be very hard to lock down the whole country for a long time, so we should also be thinking of how we can restart certain activities in certain low infection regions with enough precautions. Traffic safety, social distance, health check-ups and services need to be planned in the affected area to undo the situation after the lockdown. The difficulties in the household and corporate sectors will also affect in the financial industry. The RBI has flooded the banking system with liquidity, but perhaps it needs to go beyond for instance, lending against the high-quality pledge to well-managed NBFCs. However, more cash will not

* Associate Professor, Dept. of History, Arvindbabu Deshmukh Mahavidyalaya, Bharsingi, Tah-Narkhed, Dist-Nagpur.



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Author affiliations:

Department of Chemistry, Jawaharlal Nehru Arts Commerce & Science College, Wadi, Nagpur-440023, India

[✉]To whom correspondence to be addressed:

E-mail: rajwanare@rediffmail.com

Available online at: <http://ajomc.asianpubs.org>


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CHARSINGI, DIST. NAGPUR

ARTICLE

A Novel and Facile Synthesis of Thiopyrimidines and *O*-Glucosides

Rajendra Krushnaji Wanare[✉]

ABSTRACT

Reaction of 3-methyl-5-(3'-aryl prop-2'-enyl)-1,2-benzisoxazole (1a-j) with thiourea and alcoholic solution of KOH afforded 3-methyl-5-(4'-aryl-2'-thiopyrimidin-6'-yl)-1,2-benzisoxazoles (2a-j). Oxidation of products 2a-j using alkaline KMnO₄ solution produces 5-(4'-aryl-2'-thiopyrimidin-6'-yl)-1,2-benzisoxazole-3-carboxylic acids (3a-j). Condensation of products 3a-j with 2,3,4,6-tetra-*O*-acetyl- α -D-glucopyranosyl bromide (TAGBr), the glucosylating agent synthesized 3-(2,3,4,6-tetra-*O*-acetyl- β -D-glucopyranosyl)-5-(4'-aryl-2'-thiopyrimidin-6'-yl)-1,2-benzisoxazoles (4a-j). Subsequent deacetylation of compounds 4a-j were carried out with CH₃ONa furnishes β -D-glucopyranosyl-5-(4'-aryl-2'-thiopyrimidin-6'-yl)-1,2-benzisoxazole-3-carboxylates (5a-j). All the synthesized compounds were analyzed by elemental analysis (C, H and N), FT-IR, ¹H NMR and mass spectral data. Most of the prepared compounds were analyzed their antibacterial and antifungal activities by cup-plate method. The present approach offers several advantages such as shorter reaction times, cleaner reactions, good yields, low-cost reagent and mild reaction conditions.

KEYWORDS

Thiopyrimidines, 1,2-Benzisoxazoles, TAGBr, Glycosylation, *O*-Glucosides.

INTRODUCTION

Various thiopyrimidines have been synthesized by a facile and efficient method and showed good anti-inflammatory, analgesic, analgesic, protein kinase and inhibitory activities [1,2]. Its derivatives attracted organic chemists due to their biological and chemotherapeutic importance and related fused heterocycles are important classes of heterocyclic compounds that exhibit a broad spectrum of biological importance such as anticancer, antiviral, antibacterial, antioxidant, anxiolytic, antidepressant and analgesic that are well documented in the literature [3-8]. Glucosides are normally water soluble and optically active compounds. *O*-Glucosides are the acetals of alcohols or phenols and are widely distributed in nature in plants and animals. The main function of *O*-glucosides is to serve as a handle of pharmacophoric group for recognition of the structure by target cells. It also helps in the interaction of organic molecules to enter into the membrane glycoprotein and finally entering the cell cytoplasm of target cells and has been the subject of considerable interest in carbohydrate

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In Vitro Study of Interactions of Carboxamide Derivatives of Amino Acid with BSA: Ultrasonic Interferometer

Shrikant Bandupant Thakare, Pradip Vitthalrao Tekade*, Ajay Madhukarrao Pisuddes

Department of Chemistry, Jankidevi Bajaj College of Science, Jamnalal Bajaj Marg, Civil lines, Wardha-442001-M.S. India.

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Abstract:

In this paper we account the interaction of the Carboxamide derivatives of amino acid viz 2-[[2-(cyclohexylcarbonyl) benzoyl] amino] propanoic acid (2CMPA), 2-Benzamido acetic acid 2-cyclohexyl carboxamide (2BA2C), 2-[[2-(cyclohexylcarbonyl) benzoyl] amino]-3-methylbutanoic acid (2CA3MBA), 2-benzamido-4-methylpentanoic acid-2-cyclohexyl carboxamide (2-BMCA) and 2-[[2-(cyclohexylcarbonyl) benzoyl] amino]-4-(methylsulfanyl) butanoic acid (2CA4MBA) with protein Bovine serum albumin (BSA) using ultrasonic interferometer technique. Ultrasonic velocity for complex solution of different compounds of carboxamide derivatives of amino acid with BSA has been measured at their different composition using ultrasonic interferometer. Difference in the ultrasonic velocity at different compositions of complex is measure of binding of the compounds with BSA. Binding effect at various pH viz. 3, 4 and 5 shows that compounds bound to the BSA more significantly at acidic pH and association constant decreases with increase in pH value. Scatchard analysis gives the values of association constants (K_f) for all the compounds at pH 3, 4 and 5 respectively.

Keywords: ultrasonic interferometer; bovine serum albumin; carboxamide; association constant; scatchard analysis

1. Introduction

Binding of drug to plasma protein is one of the efficient biological characteristics of that drug. There are various proteins which show affinity for the drugs depending on their nature. There are various plasma protein such as Human serum albumin (HSA) and Bovine serum albumin Alpha acid glycoprotein (AGP) and Lipoprotein etc which shows affinity towards the drugs. These proteins perform various functions out of that drug binding and their transportation is an important one.

BSA is the moiety with large molecular weight ($M_r = 66,500$) contains 583 amino acids. As BSA is a major protein in blood, any change in level of BSA produces effect on transportation of drug. BSA is alkaline having 7-8 pH range [1] hence it shows the affinity for acidic drugs. There are various forces which are responsible for binding

of drug to plasma protein viz. hydrogen bonding, vander wall forces, electrostatic attraction etc.

Binding study of various drugs with plasma proteins has been done such as the effect of binding on specific site of BSA for ciprofloxacin and captopril drugs in presence of specific site probe studied using equilibrium dialysis [2]. The protein-protein and protein-ligand interactions involved in retinol transport studied in plasma [3]. Interaction of drugs like i-bruprofen & naproxen shows successive binding to protein [4]. Effect of arsenic on binding of protein with warfarin and acetaminophenol observed [5]. Crystal structure analysis of binding of warfarin to BSA also studied [6]. NMR Spectroscopic approach reveals metabolic diversity of human blood plasma associated with protein drug interaction [7].

Effect of arsenic on binding of paracetamol

*Corresponding author. E-mail: pradiptekade@gmail.com

Comparative Binding Analysis of Pyrimidine Derivative to BSA: Equilibrium, FTIR and Acoustical Study

Ajay Madhukarrao Pisudde, Pradip Vitthalrao Tekade*, Shrikant Bandupant Thakare

Department of Chemistry, Jankidevi Bajaj College of Science, Jamnalal Bajaj Marg, Civil lines, Wardha-442001-M.S. India

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Abstract:

This paper presented the comparative binding interaction of ethyl-4-(4-hydroxyphenyl)-6-methyl-2-oxo-1,2,3,4-tetrahydropyrimidine-5-carboxylate (4-HP2OTP) and ethyl-4-(2-hydroxyphenyl)-6-methyl-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carboxylate (2-HP2STP) to bovine serum albumin (BSA) in 1,4-dioxane, DMSO and DMF by equilibrium dialysis, FT-IR and acoustical study at physiological pH. The binding data obtained was interpreted by scatchard plot, which gives the association constants. An increase in association constants is observed with increase in temperature and concentration. FT-IR study explains the binding through shifting in peak positions of amide I and II. It explained the changes in secondary structure of BSA on binding with the drugs. The free energy (ΔG), enthalpy (ΔH) and entropy (ΔS) values were calculated by using van't Hoff equation. The negative ΔG showed the spontaneous process and positive values of ΔH and ΔS showed endothermic interaction between ligands and BSA. ΔG becomes more negative with increased in temperature, indicated feasibility of binding interaction at high temperature. The positive values of ΔH and ΔS also showed specific electrostatic and hydrophobic interaction between ligand and BSA.

Keywords: equilibrium dialysis; FT-IR; acoustical study; BSA; scatchard analysis; thermodynamic parameters

1. Introduction

Serum albumins are the most abundant proteins in the circulatory system of wide variety of organisms, being the major macromolecules contributing to the osmotic blood pressure [1]. Their functional and physiological properties have been studied over several decades [2]. These proteins have long been used as model proteins in both industrial and academic research areas [3]. The protein is single polypeptide chain of 585 amino acids with a large helical triple domain structure with the concentration of 0.63 mM in the blood. Protein binds relatively a number of insoluble endogenous drugs such as unesterified fatty acids, bilirubin and bile ducts and thus facilitates their transport. A variation in temperature is found to be a key factor in binding affinities of proteins [4] as evident from the drugs

ligustrazine [5], ciprofloxacin [6], methotrexate [7] and cisplatin [8]. 4-HP2OTP and 2-HP2STP are the poly-functionalized dihydropyrimidine compounds exhibiting a broad range of therapeutic and pharmacological [9], anticarcinogenic [10], antihypertensive, antiviral, antitumor, antibacterial, anti-inflammatory, calcium channel modulators [11], antimycobacterial and anticonvulsant [12], anticancer [13] properties. Human serum albumin (HSA) and BSA exhibit similar chemical properties due to high percentage of sequence identities. BSA in lieu of HSA was used in this study because of low cost and easy availability. In BSA varying binding sites are available for ligands [14-15]. Ranges of techniques are available to monitor the binding interactions of ligands to protein viz. NMR [16], isothermal titration calorimetry (ITC) [17], UV- visible absorbance [18], fluorescence [19],


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Photoluminescence Properties of Eu^{2+} doped BaAl_2S_4 Phosphor

Anjali R. Gharpure^{1,a)}, S.P. Wankhede^{1,b)}

¹Department of Physics, K.D.K. College of Engineering, Nagpur, 440009, India.

^{a)}Corresponding author: anjali22rr@gmail.com

^{b)}spwankhede20@gmail.com

Abstract. A study of the luminescence properties of Eu^{2+} doped BaAl_2S_4 is presented in this paper. Philippe Smet et al prepared BaAl_2S_4 powder from a mixture of BaS and Al_2S_3 under a flowing H_2S atmosphere. BaAl_2S_4 was also obtained by the sulfurization-reduction of the multi component oxide precursor in a CS_2 atmosphere at 1050°C . These methods require special apparatus. Hence, we attempted a soft chemical route for developing BaAl_2S_4 phosphors. This method does not require the H_2S gas flow during synthesis. $\text{BaAl}_2\text{S}_4:\text{Eu}^{2+}$ shows emission centered at 495nm . $\text{BaAl}_2\text{S}_4:\text{Eu}^{2+}$ emission provides good CIE color coordinates for blue component in display applications.

INTRODUCTION

It has been observed that alkaline earth thioaluminates have wider band gaps than homologous thiogallates. The $\text{MS-Al}_2\text{S}_3$ systems have been little investigated. The MAl_2S_4 phases ($\text{M} = \text{Ca}, \text{Sr}, \text{Ba}$) were synthesized by Eholie et al. [1] and Donohue and Hanlon [2] from mixtures of aluminium, alkaline earth metal or MS sulphide, sulphur, maintained for several days at temperatures between 800 and 1000°C . Thereafter Le Thi et al. obtained BaAl_2S_4 by heating a mixture of BaS and Al_2S_3 in an evacuated silica tube [3].

BaAl_2S_4 was also prepared from a mixture of BaS and Al_2S_3 under a flowing H_2S atmosphere [4]. There after BaAl_2S_4 was also obtained by the sulfurization-reduction of the multi component oxide precursor in a CS_2 atmosphere at 1050°C [5]. Several other synthesis techniques were proposed, such as using Al instead of the hygroscopic Al_2S_3 [6]. During the synthesis, the Al precursor liquefies and lowers the synthesis temperature of the cubic BaAl_2S_4 phase to 660°C [7]. Other methods for the synthesis of $\text{BaAl}_2\text{S}_4:\text{Eu}^{2+}$ rely on a solution based approach for the synthesis of the $\text{BaS}:\text{Eu}$ precursor [8], or on a sulfurization in a CS_2 atmosphere of a Ba-Al-Eu oxide precursor prepared by a polymerizable complex method [9].

Hence, we attempted a soft chemical route for developing this phosphor. We prepared $\text{BaAl}_2\text{S}_4:\text{Eu}^{2+}$ powders by this method. Synthesis and photoluminescence characterization of these phosphors are described in this paper.

EXPERIMENTAL

The wet chemical co-precipitation method is used to prepare Europium doped barium thioaluminates ($\text{BaAl}_2\text{S}_4:\text{Eu}^{2+}$) phosphor. The starting materials are used such as $\text{BaCl}_2 \cdot 2\text{H}_2\text{O}$, $\text{AlCl}_3 \cdot 6\text{H}_2\text{O}$, Eu_2O_3 , sulphur and hydrazine hydrates.

In this method the sulphur is dissolved in an aqueous solution of hydrazine hydrate (solution 1). An excess of hydrazine hydrate is used with at least 2:1 mole ratio of hydrazine hydrate to the sulphur. The stoichiometric amount of barium chloride is dissolved in water in one beaker. The stoichiometric aluminium chloride is dissolved in water in another beaker. These aqueous solutions are mixed with (solution 1) with stirring. The appropriate amount of Europium chloride is added to this solution. Then appropriate amount of ammonium carbonate is added. The mixture is stirred for 45 min and then filtered. The ppt. is washed with one liter of water and dried at 110°C . The

Wet Chemical Synthesis And Photoluminescence Study of SrAl₂S₄:Eu²⁺,Ce³⁺ Phosphor

Anjali R.Gharpure^{1,a)}, S.P.Wankhede^{2,b)},A.M.Badar^{3,c)}

^{1,2,3}Department of Physics, K.D.K. College of Engineering, Nagpur, 440009, India.

^{a)}Corresponding author: anjali22rr@gmail.com

^{b)}spwankhede20@gmail.com,

^{c)}am1_badar@yahoo.com

Abstract. Yu et al described the structural and luminescent properties of SrAl₂S₄:Eu²⁺ and synthesized this phosphor by the evacuated sealed quartz ampoule method. Le Thi et al investigated SrAl₂S₄:Eu²⁺ by solid state method. These methods are rather tedious, and require special apparatus. We have described a wet chemical co-precipitation procedure for synthesizing highly efficient Eu²⁺,Ce³⁺ activated phosphors with strong excitation in nUV region. This method does not require the H₂S gas flow during synthesis and comparatively easy to handle. We successfully prepared SrAl₂S₄:Eu²⁺, SrAl₂S₄:Ce³⁺ powders by this method. Synthesis and photoluminescence characterization of these phosphors are described in this paper. The SrAl₂S₄:Eu²⁺ phosphor shows intense emission in the green region peaking around 515 nm. The excitation covers broad range from 220-430 nm peaking at 335nm. The SrAl₂S₄:Ce³⁺ shows emission wavelength of 380 nm for 324nm excitation. SrAl₂S₄:Eu²⁺ emission provides good CIE color coordinates(X= 0.209, Y= 0.548) for green component in display applications.

INTRODUCTION

Alkaline earth thioaluminates are expected to have wider band gaps than homologous thiogallates. The MS-Al₂S₃ systems have been little investigated. The MA₂S₄ phases (M = Ca, Sr, Ba) were synthesized by Eholie et al.[1] and Donohue and Hanlon [2] from mixtures of aluminium, alkaline earth metal or MS sulphide, sulphur, maintained for several days at temperatures between 800 and 1000° C. SrAl₂S₄:Eu²⁺ shows bluish-green color with emission peaking at 495 nm[3,4]. Le Thi et al investigated SrAl₂S₄:Eu²⁺ by solid state method. He described a new phase SrAl₂S₅ in addition to SrAl₂S₄[3].Thereafter Yu et al described the structural and luminescent properties of SrAl₂S₄:Eu²⁺ and synthesized this phosphor by the evacuated sealed quartz ampoule method [5].Green emitting phosphor SrS-Al₂S₃:Eu²⁺ is prepared by the wet chemical co-precipitation method. In this paper we are reporting Ce³⁺ and Eu²⁺ luminescence in Strontium thioaluminates host.

EXPERIMENTAL

The wet chemical co-precipitation method is used to prepared Europium and Cerium doped strontium thioaluminates (SrAl₂S₄:Eu²⁺ and SrAl₂S₄:Ce³⁺) phosphor. The starting materials are used such as SrCl₂.2H₂O, AlCl₃.6H₂O, Ce₂(SO₄)₃, Eu₂O₃, sulphur and hydrazine hydrate. The phosphor is heated at 900°C for 1 hour in reducing atmosphere by using burning charcoal. In this method the sulphur is dissolved in an aqueous solution of hydrazine hydrate (solution 1). An excess of hydrazine hydrate is used with at least 2:1 mole ratio of hydrazine hydrate to the sulphur. The stoichiometric amount of barium chloride is dissolved in water in one beaker. The stoichiometric aluminium chloride is dissolved in water in another beaker. These aqueous solutions are mixed with (solution 1) with stirring. The appropriate amount of Europium chloride is added to this solution. The mixture is stirred and then filtered. The ppt. is washed with one liter of water and dried at 110° C. The powder obtained is