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SYNTHESIS OF 2-ARYL THIO ARYL CYANAMIDES FROM 2-IODO ARYL ISOTHIOCYANATES IN ONE POT THREE COMPONENT REACTION BY USING IRON AS A CATALYST

B. Jhansi Lakshmi*[1], A. Chandra Leela[2], G. Alluraiah[3] and B. Koteswara Rao[4]

[1]Dept. of Chemistry, SAS Govt. Degree College, Narayana Puram, Eluru District, Andhra Pradesh, India.
[2]Dept. of Chemistry, Andhra University, Visakhapatnam, Andhra Pradesh, India.
[3]Dept. of Chemistry, S V Arts & Science college, Giddalur, Prakasam Dist, Andhra Pradesh – India.
[4]Dept. of Chemistry, Govt. Degree College, Chebrole, Guntur Dist. Andhra Pradesh – India.

***Corresponding Author: B. Jhansi Lakshmi**
Dept. of Chemistry, SAS Govt. Degree College, Narayana Puram, Eluru District, Andhra Pradesh, India.
Email id: psrsvrm@gmail.com

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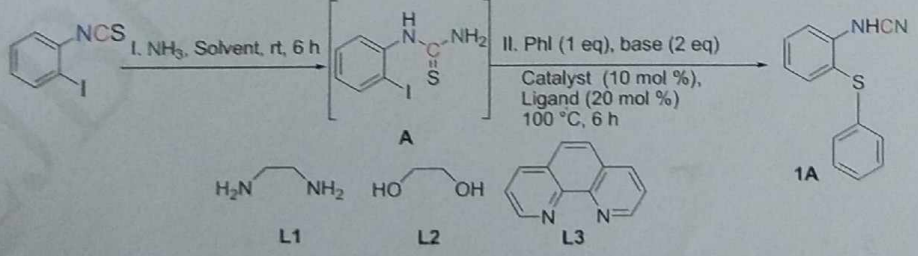
INTRODUCTION

Due to its unique reactivity, cyno group is recognized as important building block and is found in various bioactive molecules and functionalized materials.[1] Cyanamides are useful precursors and important synthetic intermediates for the synthesis of biological, medicinal and pharmaceutically important hetero-cycles.[2] Since the cyano group is easy removal from cyanamide and N-alkyl or N-aryl imides,[3] they often represent as a useful protecting groups in the synthesis of secondary and tertiary amines containing heterocycles.[4] Aromatic cyanamides have also been prepared by both classical and ancient methods.[5]

In recent years, the formation of carbon-heteroatom bonds[6] towards the synthesis of heterocyclic compounds has been developed through cross-coupling reactions using transition-metal-catalysis. Among these, carbon-sulfur bond formation has received much attention due to the presence of this moiety in many molecules that are of biological, pharmaceutical and material interest.[7] Recently the above said moieties containing compounds like 2-(arylthio) aryl cyan-amides from 2-halophenyl thiourea via domino C-S cross-coupling reaction using copper as catalyst.[8] But to the best of our knowledge no one has reported in the presence of iron.

Therefore, herein, we wish to demonstrate the one-pot synthesis of 2-(arylthio) aryl cyanamides from 2-iodoaryl isothiocyanate and aryl iodides using cheap, readily available and air stable iron source as catalyst under milder conditions.

Table 1: Standardization for the reaction conditions.



Entry	Solvent	Catalyst	Base	Ligand	Conversion[b]	
					A	1A
1	EtOH	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	100	n.d.
2	EtOAc	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	100	n.d.
3	n-Hexane	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	n.d.	n.d.
4	n-Heptane	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	n.d.	n.d.
5	H_2O	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	70	n.d.
6	DMF	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	45	55
7	DMSO	$Fe_2(SO_4)_3 . H_2O$	$K_3PO_4 \cdot 3H_2O$	L3	45	55

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DEVELOPMENT AND VALIDATION OF A SENSITIVE AND STABLE HSGC-MS/MS METHOD FOR SIMULTANEOUS DETERMINATION OF TWO N-NITROSAMINE IMPURITIES IN OMEPRAZOLE SODIUM DRUG SUBSTANCES AND DRUG PRODUCTS BY USING QUALITY BY DESIGN APPROACH

[1]Korrapati Umamaheswar*, [2]Vardhana Syamala, [3]B. Jhansi Lakshmi,

[4]Chilakapati S R G Kalyani, [5]B. Kamala Babu.

[1,2] Assistant Professor, Department of Chemistry, Bapatla Engineering College, Bapatla, Andhra Pradesh, India

[3] Lecturer, Department of Chemistry, SAS Govt. Degree College, Narayanapuram, Eluru District, Andhra Pradesh, India

[4] Assistant Professor, S.V.R.M. College, Nagaram, Bapatla District, Andhra Pradesh, India

[5] Lecturer, Department of Chemistry, TRR Govt. Degree College, Kandukuru, Andhra Pradesh, India

Abstract:

Nitrosamine impurities in angiotensin II receptor antagonists containing a tetrazole group represent an urgent concern for active pharmaceutical ingredient (API) manufacturers and global regulators. Regarding safety, API manufacturers must develop methods to monitor the levels of each nitrosamine impurity before individual batch release. In this study, we developed and validated a sensitive, selective, and high throughput method based on headspace gas chromatography-mass spectrometry with Multiple reactions monitoring mode (MRM) (HSGC−MSMS) for the simultaneous determination of two nitrosamines, namely, N-Nitrosodimethylamine (NDMA) and N-nitrosodiethylamine (NDEA) in Omeprazole sodium drug substances and products by using quality by design approach.

The quantification of two nitrosamines in Omeprazole sodium drug substances and products ranged from 0.07 ppm with respect to the sample concentration of 1000 mg/mL with good sensitivity in LOQ level. The limit of quantification is 0.021 ppm and limit of detection is 0.007 ppm for NDMA and NDEA with respect to the sample concentration of 1000 mg/mL with good sensitivity in the proposed method. The calibration curves of the assay ranged from 0.035 to 0.105 ppm with limits of quantitation of 0.021 ppm for NDMA and NDEA. The recoveries of two N-nitrosamines in selected Omeprazole sodium drug ranged from 85% to 115%. The precision was in the acceptance criteria of bellow 10% for NDMA and NDEA. Other validation parameters, including specificity, robustness, ruggedness, solution stability met the validation criteria.

Therefore, this proposed HSGC-MSMS method exhibited good sensitivity and precision, high accuracy, and fast analysis speed, which provide a reliable method for quality control of two N-nitrosamines in Omeprazole sodium drug substances and products. This method is applied for pharmaceutical dosage forms, results met the with the specifications. In conclusion, it will be useful to quantify the low-level nitrosamines in Omeprazole sodium drug substances and products.

Index Terms: **Omeprazole sodium, N-Nitroso dimethyl amine, N-nitroso diethyl amine, HSGC-MS/MS, method development and validation.**

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Study the Impact of Endosulfan Pesticide on behavioral responses in the Fresh Water Fish Labeo Rohita

B. Kamala Babu[1] G Alluraiah[2], B. Jhansi Lakshmi [3], A. Chandra Leela [4]

[1]Dept. of Chemistry, T R R Govt. Degree college, Kandukur. Andhra Pradesh - India
[2]Dept. of Chemistry, S V Arts & Science college, Giddalur, Andhra Pradesh - India
[3]Dept.of Chemistry, SASGovt. Degree College, NarayanaPuram, AndhraPradesh, India.
[4]Dept. of Chemistry, Andhra University, Visakhapatnam, Andhra Pradesh, India

ABSTRACT ***Static renewal test was conducted to determine the toxicity of technical grade (91.06% purity) insecticide Endosulfan on the freshwater fish Labeo Rohita. Fishes were exposed to various concentrations of insecticide Endosulfan for 96 hours and the percent mortality was recorded. Behavioral responses and morphological deformities were studies in the experimental periods. Fish in toxic media exhibited irregular erratic and darting swimming movements. The behavioral and morphological changes may be due to the formation of amino acids by degradation of proteins with concentration of pesticide.***

Keywords: Endosulfan, Labeo Rohita, Behavioral changes, Amino acids and Proteins.

INTRODUCTION

Endosulfan is an off patent organo chlorine insecticide and acaricide that is being phased out globally. Endosulfan becomes a highly controversial agrichemical1due to its acute toxicity. Potential for bioaccumulation, and role as an endocrine disruptor, because of its threats to human health and the environment, a global ban on the manufacture and use of Endosulfan was negotiated under the Stockholm convention in April 2011. More than 80 countries including the European Union, Australia, New Zealand several west African nations, the United States, Brazil, and Canada had already banned it or announced phase outs by the item the Stockholm convention ban was agreed upon2. It is still used extensively in India, China, and few other countries. It is produced by Makhteshim Agan and several manufacturers in India and China despite laws against its use. It is also used in few countries.

Endosulfan is a derivative of hexachlorocyclopentadiene, and is chemically like aldrin, chlordane and heptachlor and it is obtained by Diels – Alder reaction3. Endosulfan is one of the most toxic pesticides in the market today. It is used in agriculture sector to control insect pests including white fly, aphids, leafhoppers, Colorado potato beetles and cabbage worms. Due to its unique mode of action, it is useful in resistance management; however, as it is not specific, it can negatively impact populations of beneficial insects. It is, however, considered to be moderately toxic to honey bees, and it is less toxic to bees than organophosphate insecticides. Endosulfan is acutely neurotoxic to both insects and mammals, including humans. The US EPA classifies it as Category I: "Highly Acutely Toxic" based on a LD50 value of 30 mg/kg for female rats, while the World Health Organization classifies it as Class II "Moderately Hazardous" based on a rat LD50 of 80 mg/kg. It is a channel antagonist, and a Ca2+, Mg2+ATPaseinhibitor13

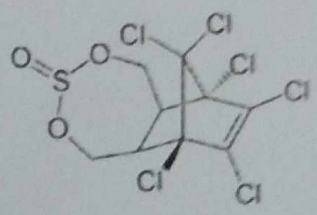

Figure 1. Structure of Endosulfan

A major part of the world's commercial food is being supplied from fish source and it is essential to secure the health of fishes. In India, as much as 70% of the chemical formulations employed in agricultural practices are believed to affect non-

COMPOSITION AND METHOD FOR THE PREPARATION OF NANOPARTICLES WITH CONTROLLED RELEASE PROPERTIES FOR DRUG DELIVERY APPLICATIONS

FIELD OF THE INVENTION

The present invention generally relates to drug delivery applications. More specifically, the invention relates to composition and method for the preparation of nanoparticles with controlled release properties for drug delivery applications.

BACKGROUND OF THE INVENTION

The field of drug delivery has witnessed significant advancements aimed at enhancing therapeutic efficacy and patient compliance. One promising approach involves the use of nanoparticles as carriers for controlled release of therapeutic agents. These nanoparticles provide numerous benefits, such as improved drug stability, targeted delivery, and prolonged release kinetics.

Traditional drug delivery systems often suffer from limitations such as rapid drug degradation, non-specific distribution, and insufficient drug concentrations at the desired site of action. To overcome these challenges, researchers have explored the use of biocompatible polymers to encapsulate therapeutic agents within nanoparticles. This approach offers several advantages, including protection of the drug from enzymatic degradation, controlled release kinetics, and enhanced bioavailability.

Poly(lactic-co-glycolic acid) (PLGA) is a commonly employed biocompatible polymer in nanoparticle-based drug delivery systems. PLGA possesses desirable properties, such as biodegradability, biocompatibility, and tunable release kinetics. By adjusting the ratio of lactic acid and glycolic acid units in the polymer, the degradation rate and release profile of encapsulated drugs can be precisely controlled.

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(71)**Name of Applicant :**

1)DR. RAMACHANDRA R K

Address of Applicant :PRINCIPAL, GOVERNMENT DEGREE COLLEGE, CHODAVARAM, ANAKAPALLE DIST 531036 ----------

2)DR. ESUB BASHA SHAIK

3)DR. P V S S S N REDDY

4)DR. T K VISVESWARAYA RAO

5)DR. TIRUPATHI RAO

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)DR. RAMACHANDRA R K

Address of Applicant :PRINCIPAL, GOVERNMENT DEGREE COLLEGE, CHODAVARAM, ANAKAPALLE DIST 531036 ----------

2)DR. ESUB BASHA SHAIK

Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF PHYSICS GOVERNMENT COLLEGE (AUTONOMOUS) E G DIST RAJAHMUNDRY 533105 Email: ---------- ----------

3)DR. P V S S S N REDDY

Address of Applicant :ASSISTANT PROFESSOR DEPARTMENT OF PHYSICS GOVERNMENT COLLEGE (AUTONOMOUS) E G DIST RAJAHMUNDRY 533105 Email: ---------- ----------

4)DR. T K VISVESWARAYA RAO

Address of Applicant :PRINCIPAL SAS GOVERNMENT DEGREE COLLEGE NARAYANAPURAM W G DIST email: ---------- ----------

5)DR. TIRUPATHI RAO

Address of Applicant :RESEARCH SCHOLAR DEPARTMENT OF PHYSICS CRYSTAL GROWTH AND NANOSCIENCE RESEARCH CENTER, GOVERNMENT COLLEGE (AUTONOMOUS) RAJAHMUNDRY E G DIST 533105 email: ---------- ----------

(57) Abstract :

METHOD FOR THE SYNTHESIS OF QUANTUM DOTS WITH TUNABLE OPTICAL PROPERTIES FOR USE IN PHOTOVOLTAIC DEVICES ABSTRACT The present invention discloses a method for the synthesis of quantum dots with tunable optical properties for use in photovoltaic devices. The method involves the controlled growth of quantum dots by manipulating reaction conditions and adjusting parameters to achieve desired sizes, compositions, and optical characteristics. The synthesized quantum dots offer tunability in terms of bandgap, absorption, and emission wavelengths, making them suitable for efficient light absorption and power conversion in photovoltaic devices. The method begins by providing a precursor solution containing semiconductor materials and capping ligands. The reaction conditions, including temperature, pressure, and reaction time, are carefully controlled to promote the growth of quantum dots with specific properties. The size of the quantum dots is controlled by adjusting the concentration of the precursor solution and the reaction time, while the composition is manipulated by varying the stoichiometry of the semiconductor materials.

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SECURITY THREATS AND MEASURES AND HOW TO OVERCOME FROM IN SUPERIOR CLOUD

[1]Dr.Srinivasa Ravi Kiran.T, [2]Dr.Putta Baburao and [3]Bilugudi Prasanth
[1]HoD & Associate Professor,Department of Computer Science,P.B.Siddhartha College of Arts & Science Vijayawada, A.P., India
[2]Lecturer in Mathematics,SAS Government Degree College, Narayanapuram, Eluru District, A.P, India
[3]22MCA54, M.C.A Student,Department of Computer Science, P.B.Siddhartha College of Arts & Science, Vijayawada, A.P, India

Abstract—Cloud computing is a highly popular technology known for its cost-effectiveness, reliability, rapid access, flexibility, and scalability for computer operations. The IT industry has witnessed significant growth in cloud computing adoption. However, IT organizations have raised concerns regarding security in cloud computing due to the outsourcing of essential services to third parties, making it challenging to maintain data security and confidentiality. This paper offers insights into security threats associated with cloud computing and suggests potential countermeasures.

Keywords—Cloud Computing, Security, Threats, Confidentiality.

Introduction

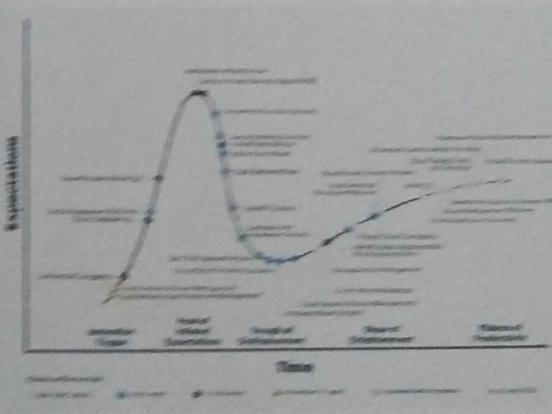
Cloud computing offers a range of computing services, including servers, storage, databases, networking, software, and analytics, delivered over the internet. It functions as a network for storing and sharing resources. In the cloud, you pay only for the services you use, such as storage on a pay-as-you-go basis, reducing operating costs and improving organizational efficiency. In cloud environments, multiple virtual machines can coexist on the same physical server infrastructure.

he main concerns of many IT organizations revolve around areas like external data storage, reliance on the public internet, limited control, multi-tenancy, and integration with internal security systems. Cloud computing differs from outdated technologies due to its vast scale and complete distribution and visualization of resources. To ensure security in the cloud, it is crucial to implement mechanisms like robust authentication, confidentiality for personal information, and measures to prevent data loss.

1.1 Virtualization:

Cloud computing relies on virtualization, where various virtual machines can operate with different operating systems and run multiple applications while sharing a single underlying physical computer. This approach prevents cloud vendors from the burden of providing individual physical resources to each customer. Instead, it enables efficient resource utilization in the cloud, making virtualization a smart choice.

Fig. 1. Hyper Cycle for Cloud Security, 2020.



1.2 Types of Cloud Environments:

Public, Private, Hybrid and Community clouds.

Public Cloud: A public cloud is standard model which providers make several resources, such as applications and storage, available to the public. Public cloud services may be free or not.

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IMPACT OF COVID 19 ON TEACHING, LEARNING AND RESEARCH IN HIGHER EDUCATION

Authors:

1. MSK Krishna Jyothi
Lecturer in History
SRR & CVR Government Degree College (A)
Vijayawada,

2. P.Bhaskar Rao,
Lecturer in History,
SAS GDC,
Narayanapuram, West Godavari district,AP,

3. K.Uma Sankar,
Lecturer in Political Science,
SAS GDC,
Narayanapuram, West Godavari district, AP,

4. G.Nirmala Jyothi
Lecturer in History,
SAS GDC,
Narayanapuram, West Godavari district,AP,

5. B.Prakasam
Lecturer in History
SRR & CVR Government Degree College (A)
Vijayawada,

ABSTRACT

Learners and teachers at all levels of education have been affected by COVID-19 restrictions with rapid adaptations to virtual learning platforms. The impact of COVID-19 on learners is not evenly distributed and children of under-privileged groups, those who live in poverty, those requiring special education, and children who cannot afford digital equipment are more negatively affected by the need for remote learning. Psycho disorders like anxiety and depression have increased as a result of COVID-19 itself and as a consequence of change in mode of learning. Restrictions on traveling, social distance, and funding restrictions affected research work in higher education. Non-medical researchers were slowed down but research in medical field is induced.

Dalit Women and Colonial Christianity

First Telugu Bible Women as Teachers of Wisdom

CHAKALI CHANDRA SEKHAR

The paper focuses on the history of the first three Bible women, Mary Wesley, Martha Reuben, and Bathsheba, who came from marginalised communities in Rayalaseema, and emerged as new leaders of social change in the context of colonial modernity and Christianity in the region. The emergence of a modern profession of Bible woman for Dalit women in the 1870s was transformative, opening doors of education, learning, and transforming them into local leaders. Bible women played a pivotal role in the history of Dalits, gender, and missions by shaping the life and community of Dalits and spreading Christianity in Rayalaseema.

The author is grateful to K Satyanarayana from EFLU, Hyderabad for his supervision and comments on earlier drafts, to Rupa Viswanath (CeMIS-Goettingen) for her discussions and encouragement to publish in the *EPW* and to James Elisha Taneti (Union Presbyterian Seminary, US) for his inputs on the paper and to reviewers for the comments. The author also acknowledges the support given in 2016 by Charles Wallace India Trust Fellowship and AHRC research network "Writing, Analysing, Translating Dalit Literature" (hosted by Nottingham Trent University and the University Paul Valery Montpellier) to collect archival material from SOAS, the British Library of London and Weston Library of Oxford.

Chakali Chandra Sekhar (*chandueflu@gmail.com*) teaches at the Sri Aravinda Sathajayanthi Government Degree College, Narayanapuram, West Godavari District, Andhra Pradesh.

While historical studies have examined Bible women and their contribution to the missionary movement in South Asia (Sebastian 2003; Haggis 1998; Kent 1999; Taneti 2013; Mohan 2017), relatively little attention has been focused on studying how the profession of Bible women started in India, particularly in the Telugu-speaking regions, especially the endeavours of the first Telugu Bible women. Based on insights from some of the studies mentioned above, this is an effort to listen to the voice of the first three Bible women of Rayalaseema[1] that have remained silenced by the missionaries and unnoticed by historians. Moreover, in doing so, it analyses their emergence as new leaders of social change and their contribution to the transformation of gender roles and patriarchal structures among the people in Rayalaseema society. The paper draws on archival material, such as colonial administrative reports, as well as a wide range of missionary sources, and additionally uses oral interviews from the field.

In Rayalaseema, Dalit communities (Malas and the Madigas) were the lowest in the social order. For centuries, they were despised and degraded, kept in a state of servitude by the dominant castes.[2] Further, they were subjected to untouchability and unseenability. Their presence and approach, considered impure, was despised by other castes and even their shadow was believed to be polluting. The caste system, with its hierarchical social structure, did not recognise their social value and did not treat them as human beings. In addition, Dalits were not allowed to access public places, such as temples, schools and drinking water wells (Cornish 1874: 118). However, their encounter with Christianity brought visible changes in their life.

In 1822, protestant mission groups such as London Missionary Society (LMS) established their mission station at Cuddapah in Rayalaseema region. Even though individual conversions of Dalits began in the 1820s, mass conversions among the Dalits in Cuddapah and Kurnool districts took place in 1851 (Porter 1885: 46). Initially, the missionaries focused on the conversion of men, as the wives of missionaries were unable to devote their time and strength entirely for women's work, because of family and household responsibilities. However, in the 1870s, the office of Bible women emerged in Rayalaseema with the expectation that they would find access to families and women, otherwise inaccessible to Christian influence. This office was a direct result of a movement that began in England in the 1850s. Mary, Martha and Bathsheba were

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Research articles

Study of magnetic behavior in co-precipitated Ni–Zn ferrite nanoparticles and their potential use for gas sensor applications

Ch. Srinivas[a,*], E. Ranjith Kumar[b], B.V. Tirupanyam[c], Sher Singh Meena[d,*], Pramod Bhatt[d], C.L. Prajapat[e], T.V. Chandrasekhar Rao[e], D.L. Sastry[f,*]

[a] Department of Physics, Sasi Institute of Technology and Engineering, Tadepalligudem 534101, India
[b] Department of Physics, Dr. N.G. P. Institute of Technology, Coimbatore 641 048, India
[c] Department of Physics, Sri Aravinda Satajayanthi Government Degree College, Narayanapuram 533 401, India
[d] Solid State Physics Division, Bhabha Atomic Research Center, Mumbai 400 085, India
[e] Technical Physics Division, Bhabha Atomic Research Center, Mumbai 400 085, India
[f] Department of Physics, Andhra University, Visakhapatnam 530003, India

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ABSTRACT

A series of $Ni_xZn_{1-x}Fe_2O_4$ (x = 0.5, 0.6, 0.7) were obtained by co-precipitation technique and followed by sintering at 800 °C. The random variation of bond angles resembles possible cation redistribution in the present series of ferrite samples. The cation distributions estimated from Mössbauer analysis are used to find out the net magnetic moment. The magnetic moment (n'_B) estimated from Neel's sub-lattice model is not consistent with experimental magnetic momet (n_B). But the magnetic moment (n''_B) estimated from the Yafet–Kittel (Y–K) model is in good agreement with the experimental magnetic moment (n_B), supporting the possibility of non-collinear arrangement of spins at *B*-site. The non-collinear spin arrangement at octahedral (*B*) site is influencing the magnetization of present series ferrite samples. The increase in saturation magnetization with increase in Ni^{2+} ion concentration is expected due to the decrease in non-collinear spin arrangement at octahedral (*B*) site. Higher saturation magnetization of 61.32 emu/g was reported for the composition x = 0.7. The single domain structure of samples is evident from the hysteresis loops, but interestingly nature of hyperfine interactions can be found from the Mössbauer spectra under spectral line intensities. The increase in the blocking temperature (magnetic ordering) is due to the increase in magnetocrystalline anisotropy rather than an increase in particle sizes. The composition x = 0.7 is showing good sensor response for both LPG and acetone. Moreover, its response and recovery times are less comparing to the other two compositions and therefore it is useful for the sensor fabrication.

1. Introduction

The evaluation of hazardous gas due to industrialization is a major source for environmental pollutions causing many human health diseases. Gas sensors are using widely to detect the harmful gases like CO, CO_2, SO_2, NO, NO_2, NH_3, etc [1,2]. Different semiconducting oxides of single component oxides (ex: ZnO, TiO_2) and multicomponent oxides (ex: $SrFeO_3$, $SmCoO_3$) have been used for gas sensor applications [3,4]. Now a days spinel ferrites have also been studied for different gas sensor applications. The crystal structure of spinel ferrite belongs to *fd3m* space group and its unit cell is cubic. Even today, the study Ni–Zn ferrite under nanoscale dimensions for a particular application is very interesting and its general formula unit is written as $(Zn_{1-x}^{2+}Fe_x^{3+})_{tetra}[Ni_x^{2+}Fe_{2-x}^{3+}]_{octa}O_4$ [5]. In bulk Ni–Zn ferrite as concentration of Zn^{2+} increases up to the composition x = 0.5, the saturation magnetization (M_s) steadily increases due to strengthening of *A–B* super exchange interaction and after M_s steadily decreases due to decrease in *A–B* super exchange interaction and increase in the *B–B* exchange interaction [6]. As the particle size is limited to the metrics of nanoscale, finite size effects come into play influencing the cation distribution between the tetrahedral (*A*) and octahedral (*B*) sites. Therefore, the strength of *A–B* super exchange interaction varied leading to change in the magnetic properties [7]. Moreover, ferrite nanoparticles can exhibit novel properties like superparamagnetism (SPM), single domain (SD) structure, spin-glassy behavior, core–shell interactions [8].

Different values of magnetization were reported for Ni-Zn ferrite prepared by using different methods [9–12]. Kavas et al. [13] prepared

* Corresponding authors.
E-mail addresses: srinivas.chintoju75@gmail.com (C. Srinivas), ssingh@barc.gov.in (S. Singh Meena), dl_sastry@rediffmail.com (D.L. Sastry).

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SMALL SCALE INDUSTRIES IN INDIA OPPORTUNITIES AND CHALLENGES

M. RAMBABU
Lecturer in Economics, S.A.S. Govt. Degree College, Narayanapuram, West Godavari (dist.)

ABSTRACT

Small scale industries (SSI) refer to those small entrepreneurs who are engaged in production, manufacturing or service at a micro scale. Small scale industries play a focal role in the economic and social development of India in the post-independence era. Small scale industries constitute the backbone of a developing economy with its effective, efficient, flexible and innovative entrepreneurial spirit .Round the world SSI units have been accepted originator of economic growth and for promoting equitable development. The contribution of SSIs to the Indian economy in terms of employment generation, reducing regional imbalances, promoting inter-sartorial linkages, magnifying exports and fostering equitable economic growth potential has been quite marvelous. This sector through more than 6000 products ranging from traditional to high-tech, consisting over 36 million units widely dispersed across the country provides employment to over 80 million persons, contributes about 8% to country's GDP beside accounting for 45% of manufactured output and 40% to the export from the country. [1] The SSI sector has the prospective to spread industrial growth round the country and can be a considerable associate in the progress of comprehensive growth. The target of proposed National Manufacturing Policy of enhancing the share of manufacturing sector in GDP to 25% and to create 100 million jobs by end of 2022, as well as to take India from its present 2 trillion dollar economy to 20 trillion dollar economy can be achieved with the help of SSI units. The paper attempts to discuss the role of small scale industries in developing the economy and explore the various problems faced by it.

Keywords: Small Scale industries, opportunities, challenges, econo.

Introduction:

Small scale industries in India and abroad exhibited considerable robustness and pliability in maintaining an unswerving rate of growth and employment generation during the global recession and economic slowdown. The Indian economy during the current fiscal years has shown considerable growth performance by contributing to create livelihood opportunities to millions of people, in magnifying the export potential and in increasing the overall economic growth of the country. As a catalyst to the socio- economic transformation of the country, the SSI sector distinctly crucial in addressing the national objective of bridging the rural- urban divide, mitigate poverty and generating employment for the admirable community of the country.SSI sector comprises almost about 80% of the total industrial units in the country. In India SSIs occupy 36 million units, contribute to 45% of industrial production, 40% to the export sector through more than 6000 products ranging from traditional to high-tech and provides employment to about 80 million persons. Therefore the small scale industries (SSI) in a developing country like India occupy a special place in the industrial structure. In view of the vast potential of small scale industries, the government has given this sector an important place in the framework of Indian economic planning for economical as well as ideological reasons

Dalit Text

Aesthetics and Politics Re-Imagined

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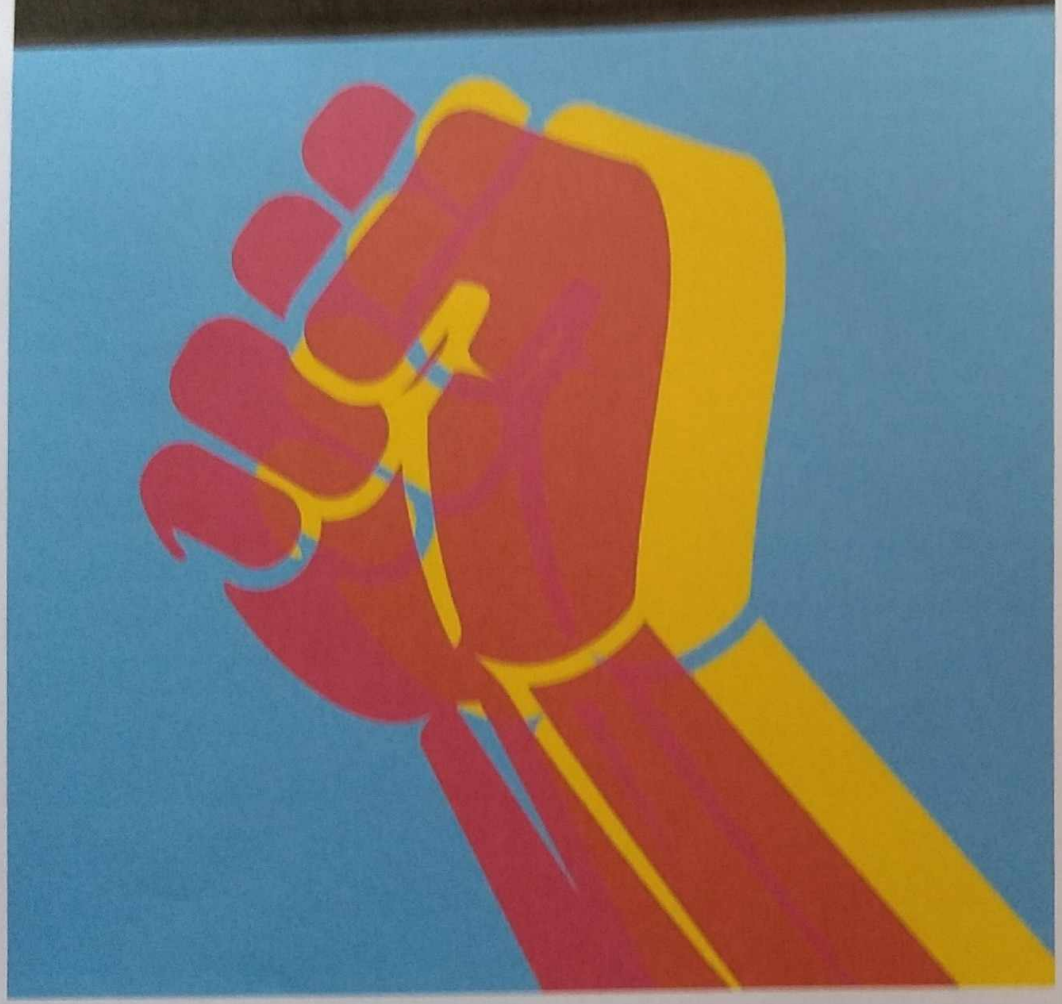

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Rietveld refinement and FTIR spectroscopic studies of Ni^{2+}-substituted Zn-ferrite nanoparticles

Ch. Srinivas[1] · M. Deepty[1] · E. Ranjith Kumar[2] · S. A. V. Prasad[1] · B. V. Tirupanyam[3] · Sher Singh Meena[4] · C. L. Prajapat[5,6] · D. L. Sastry[7]

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Abstract

Mixed spinel ferrites with stoichiometric equation $Ni_xZn_{1-x}Fe_2O_4$ ($x=0.5, 0.6, 0.7$) were synthesized by co-precipitation technique and consequently heat treated at 800 °C for 2 h. EDX spectra concluded the stoichiometry of elemental composition of present ferrite systems. Rietveld refinement of XRD patterns confirms the cubic spinel structure of the ferrite phase belonging to *Fd3m* space group. Lattice parameter (8.398–8.387 Å) is found to be in non-monotonic variation, whereas crystallite size (17.2–17.5 nm) is increased. From FE-SEM studies, the bigger ferrite nanoparticles (range of 27.9–39.4 nm) are found in the sample of composition $x=0.6$. The variation of theoretical tetrahedral and octahedral bond lengths (R'_A and R'_B) is quite opposite to the variation of bond lengths (R_A and R_B) calculated from the Rietveld refinement. The vibrational frequencies in FTIR spectra (ranging from 592 to 385 cm^{-1}) cope with the formation of spinel phase supporting the XRD results. The elastic moduli of present ferrite systems appears to be increasing, but these values are high for the composition $x=0.6$. The isotropic nature of present ferrite systems has been revealed from the same value of Poisson ratio obtained for all compositions.

1 Introduction

Spinel ferrites are the active magnetic materials in the wide spectrum of applications like transformer cores, high-density magnetic recording, high-frequency absorbers, sensors, photo-catalysts, etc. [1–4]. The physical properties of mixed ferrites like Mn–Zn, Mg–Zn, Ni–Cu, and Mn–Ni have been studied specified for a particular application. Among these ferrites, Ni–Zn ferrite is distinctive due to its important properties such as high resistivity, high saturation magnetization, low eddy current losses, mechanical hardness, etc. [5]. The reconsideration of Ni–Zn ferrite possessing nano-dimension crystallites surely preludes a new approach for biomedical applications like targeted drug delivery, cancer treatment with hyperthermia, etc. [6]. Spinel ferrite has a crystal structure MFe_2O_4 belonging to *Fd3m* space group. M in the spinel structure formula unit represents divalent metal ion like Ni^{2+}, Mn^{2+}, Mg^{2+}, Zn^{2+}, Cd^{2+}, etc. In the spinel structure, O^{2-} anions are crammed into fcc lattice with two co-ordinated interstitial sites, namely tetrahedral (*A*) site and octahedral (*B*) site. The occupancy of metal ion (M) in these sites will characterize the spinel structure of the ferrite, in such a way the complete occupancy of the M into the *A* site

✉ Ch. Srinivas
srinivas.chintoju75@gmail.com

✉ E. Ranjith Kumar
ranjueaswar@gmail.com

✉ Sher Singh Meena
ssingh@barc.gov.in

✉ D. L. Sastry
dl_sastry@rediffmail.com

1 Department of Physics, Sasi Institute of Technology & Engineering, Tadepalligudem 534 101, India

2 Department of Physics, Dr. N.G.P. Institute of Technology, Coimbatore 643 048, India

3 Department of Physics, Sri Aravinda Sathajayanthi Government Degree College, Narayanapuram 533 401, India

4 Solid State Physics Division, Bhabha Atomic Research Centre, Mumbai 400 085, India

5 Technical Physics Division, Bhabha Atomic Research Centre, Mumbai 400 085, India

6 Homi Bhabha National Institute, Anushaktinagar, Mumbai 400 085, India

7 Department of Physics, Andhra University, Visakhapatnam 530 003, India

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Article

In Search of a Touchable Body: Christian Mission and Dalit Conversions

Chakali Chandra Sekhar

Department of English, Sri Aravinda Sathajayanthi Government Degree College, Narayanapuram, Andhra Pradesh 534007, India; chandueflu@gmail.com

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Abstract: This paper significantly wishes to unpack the social and cultural impact of the mass religious conversion movements in Rayalaseema society with specific reference to Dalits during the period 1850 to 1880. This paper will use the archival material such as missionary records, magazines, pamphlets, and books written by missionaries; further, it will also utilize oral interviews collected from the field. The mass conversion movements established a relationship between Dalits and missionaries and brought them together. In their efforts to create a new Christian community of Dalit converts, missionaries had interacted with Dalits, shared meal with them, stayed with them and transformed forbidden and "polluted" ghettos into social spaces. The present paper argues that the practices of the missionaries were liberating and humanizing for Dalits. It will examine how these practices led to unintended consequences. It needs to be remembered that the missionaries' aim was not to abolish caste but to develop Christianity. How did the missionaries contribute to social interaction and build a spirit of solidarity among the Dalit converts? Based on specific situations, incidents, and examples recorded in the missionary archives and oral interviews, the article observes that community conversion movements destabilized the caste structure and brought significant changes in the social life of Dalits in colonial Rayalaseema.

Keywords: caste; Christianity; Dalits; mass conversion movements; Caste; missionaries; social equality; untouchability

1. Introduction

In Rayalaseema, the opportunity of converting into Christianity became available to the Dalits from the second half of the nineteenth century. Rayalaseema is presently one of the regions of the state of Andhra Pradesh in India. The region was called Ceded Districts during the colonial period.[1] The mission organizations which worked in Rayalaseema were the London Missionary Society (hereafter LMS) and the Society for Propagation of the Gospel (hereafter SPG). Missionary operations were first started in Cuddapah in 1822 by John Hands, who was a resident missionary of Bellary. Later, William Howell was appointed to Cuddapah as a resident missionary and Cuddapah was made a separate LMS station in 1824. Howell worked in the town and toured extensively in the district, making use of Telugu language in his preaching (Brackenbury 1914, p. 56; Bolton 1913, p. 31). The

[1] The state of Andhra Pradesh formed in 1956 comprises of three geographical regions known as the Coastal Andhra, Rayalaseema and Telangana. The first two regions were formerly a part of the Madras Presidency until 1st October 1953 when they were detached from it to form separate Andhra state. During the whole period of British Raj, the Rayalaseema region (comprised of the districts of Anantapur, Bellary, Cuddapah and parts of Kurnool) was called Ceded districts as it was ceded to the British East India Company by the Nizam in 1800. After independence, it was renamed as Rayalaseema which presently includes the districts of Anantapur, Chittoor, Kadapa, and Kurnool. In 2014, the Telangana region was declared as a separate state. At present Andhra and Rayalaseema regions remain part of the state of Andhra Pradesh.

Proto historic and Prehistoric studies in recent times

AUTHORS:

1.MSK KRISHNA JYOTHI,
Research Scholar,
Lecturer in History,
SRR & CVR Government Degree College, Vijayawada.

2. P.Bhaskar Rao,
Lecturer in History, SAS Government Degree College,
Narayanapuram, West Godavari district,AP,

3. K.Uma Sankar,
Lecturer in Political Science,
SAS Government Degree College,
Narayanapuram, West Godavari district, AP,

ABSTRACT

This essay explores recent developments in prehistoric and protohistoric studies in India, focusing on the interdisciplinary approach, human-environment interaction, technological advancements, exploration of new sites, and an emphasis on public outreach. The protohistoric period, marked by the emergence of written records, is characterized by the use of epigraphic data to reconstruct the history of ancient societies and the study of ancient trade networks. The trends discussed highlight the significant progress in understanding India's prehistoric and protohistoric past, facilitated by innovative methodologies and collaborative research.

INTRODUCTION

The prehistoric period is the period in human history before written documents were created. People at this time were not cultured. Only archeological evidence is used to study this era's past. Three sections make up this time frame:

1. Paleolithic Period (from early period to around 8000 B.C.)
2. Mesolithic Period (around 8000 B.C. to around 4000 B.C.)
3. Neolithic Period (around 4000 B.C. to around 2500 B.C.)

The time between prehistory and history is known as proto-history, and it lasts for about 2500 B.C. During this time, no culture or civilization has yet perfected writing, but other cultures have already acknowledged its presence in their own writings. until about 600 B.C.

The study of the remains of human civilizations, typically discovered through excavation, is known as pre- and protohistory (prehistoric and historic archaeology). As a result, it advances knowledge about the best era in human history. There are several ongoing trends in protohistoric, and prehistoric research in India.