

Impact Factor -(SJIF) –8.572
ISSN - 2278 -9308

FEBRUARY 2022
ISSUE NO. (CCCXXXVII) 337

B.Aadhar

Peer - Reviewed & Refereed Indexed

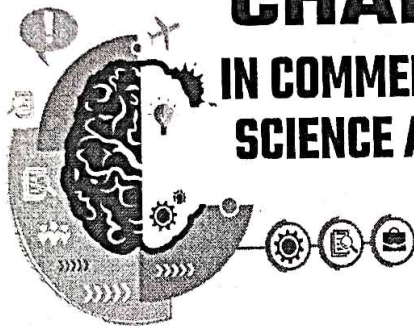
MULTIDISCIPLINARY INTERNATIONAL RESEARCH JOURNAL

International Interdisciplinary Virtual Conference on

INNOVATIONS AND CHALLENGES

IN COMMERCE, HUMANITIES, SCIENCE AND TECHNOLOGY

ICCHST-2022



Editors

Dr. Archana P. Khandelwal

Dr. Jagdish M. Saboo



This Journal is Indexed in
Scientific Journal Impact Factor (SJIF)
Cosmos Impact Factor (CIF)
International Impact Factor Services (IIFS)



For Details Visit to : www.aadharsocial.com

Aadhar PUBLICATIONS

MYL
PRINCIPAL
Art, Science & Commerce
College, Chikhaldurga



B.Aadhar

Peer-Reviewed & Refereed Indexed
Multidisciplinary International Research Journal

February, 2022

ISSUE No- (CCCXXXVII) 337-B

ICCHST-2022

Prof. Virag.S.Gawande

Chief Editor

Director

Aadhar Social Research &, Development Training Institute, Amravati.

Editor

Dr. Archana P. Khandelwal

Dr. Jagdish M. Ssboo

SHANKARLAL KHANDELWAL ARTS, SCIENCE AND COMMERCE COLLEGE,
AKOLA (MS)

Aadhar International Publication

For Details Visit To : www.aadharsocial.com

© All rights reserved with the authors & publisher

**INDEX -B**

No.	Title of the Paper	Authors' Name	Page No.
1	Changing aspects of cyber security using the implementation of Blockchain Technology	Aditya Khandelwal	1
2	Relationship between the Efficient Leadership Styles and Organizational Efficiency by inquiry Managing Director and Managers of Public Sector Organizations	Dr. Senthamil Raja Andi Selvam	5
3	Use of WINSIS as a tool for supporting Information Literacy Programme	Dr. Sachin G. Mahajan	15
4	Formulation of Research Problem	Dr. Sachin G. Mahajan	23
5	Covid-19 pandemic and employment generation in indian economy	Dr. Sandip Bhaskarrao Jagtap	26
6	A Study on Perspectives of Entrepreneurship Development	Dr. Rupa Z Gupta	29
7	Digital Marketing: A New Career Opportunity in India	Dr. Ramesh P. Deshmane	34
8	A conceptual study on tools and techniques to manage stress to ensure the work life balance.	Dr. Pallavi Mandaogade	39
9	Women Empowerment in Rural Areas – A Critical Study	Dr. Nilima Sarap (Lakhade)	44
10	“Blockchain Technology – A Conceptual Study”	Dr. Nilesh N. Chotiya	48
11	Cryptocurrency and Digital Assets.	Dr. Narendra Haribahu Shegokar	51
12	Impact of Covid-19 on the Indian Economy And Agriculture Sectors	Dr. J.M. Saboo / Dr. Monika Saboo	55
13	Understanding ‘Kaizen’ as a Powerful tool for Continuous Improvement	Dr. Mithila B Wakhare	59
14	Cyber Security Analysis Of Internet Banking In Emerging Countries	Dr. M. S. Gaikwad / Dr. J. D. Porey	62
15	Opportunities and Challenges in Commerce Higher Education in Indian Perspective	Dr. Lalchand D. Bodile	66
16	GST and Indian Economy	Prof. Dr. Jyoti R. Maheshwari	69
17	Trade in SAARC directions: an analytical study	Dr. Ghuge Sunil Balu	72
18	A Study on Bitcoin in Akola City	Dr. Devendra N. Vyas	77
19	The Contribution Of Information Technology In Accounting	Dr. Deepika Vishal Santoshwar	82
20	Forensic Accounting & Its Current Concerns	Dr. Deepak S. Jejani	87
21	Use Of Ict Tools And Free Technological E- Resources In Teaching Learning Process	Prof. Dr. Deepak D. Nilawar	91
22	Impact Of Covid-19 Pandemic On Indian Economy	Dr. Dnyaneshwar Vishnu Gore	95



23	Disaster Management in Academic Libraries in India, A Practical Approach Dr. D. R. Gabhane	98
24	Cryptocurrency: Conjectural introduction to general public Dr. Chandak Sonal Santosh	101
25	Cryptocurrency- an overview Dr. Archana Pramod Khandelwal	106
26	Current Challenges In E- Commerce Prof. Dipeeka Shrikant Ratnaparkhi	110
27	Consumer Perception Of Branded Jewelry In Nagpur Dr. Jeevanlata Agrawal	115
28	Post Covid Challenges and Opportunities in Khadi Sector Dr. Anvita Agrawal	120
29	Need of Article Indexing for Research Centers in UG and PG Colleges: An Informative Study Dr Jugal E Maldhure	124
30	A Brief Study of Globalization and E-Commerce Dr Memon Sohel Mohd Yusuf / Dr. Kathar Ganesh. N.	126
31	Impact of Artificial Intelligence in Automation of Accounting Processes Dr Memon Ubed Yusuf	131
32	Focus on Fuzzy Behaviour of Stock Market in Digitalization era. Dr Pankaj Tayde	138
33	Legality of Crypto Currency: An Overview Dr. Ambadas B. Pande	142
34	Growth, Scope & Market Challenger Strategies of Digital Marketing in India. Dr. Wasudeo D. Golait	146
35	Kaizen; Policy, Principles and Practice, With special reference to Toyota Motor Corporation Dr. A. G. Sharma	151
36	GST and Indian Economy : Introduction to GST Prof. Ashish Rameshlal Kanhu	155
37	Impact Of Gst On Indian Economy Dr. B.K.Oberoi	158
38	Role of Human Resource Management in Cooperative Sector Dr. Anil M. Tirkar	163
39	Overview of Cultural Aspects of Women's from Melghat Tribes (Korku) With reference to Gender Equality Bahadure R.B./ G.S.Wairagade	167
40	Cashless Economy in India – Present Scenario Dr. Prof.Balkrushna S. Ingle	169
41	Bitcoin and Cryptocurrency: Challenges, Opportunities and Future Works Prof. Dr.Jyoti H.Lahoti	171
42	The Rights of Human and the Constitution of India Amol Bhikaram Dhotre	175
43	New trends in Digital Marketing Dr. Khot Subhash Shamrao	178
44	Neuromarketing as a Potential Marketing Tool Dr Vinod Ratiram Bansile	182
45	Impact of accounting software on performance of accountants in saurashtra region Devita D. Movaliya / Dr. Rajesh Mulchandani	189
46	Innovative Ways to Teach Chemistry: A Case Study D.S. Hedaool*, R.P.Rahate2, M.P.Wadekar3	195



47	GST And Indian Economy	Dr.D.P.Parate	198
48	A Study Of Impact And Challenges Of Gst On Various Constituents Of Indian Economy	Boob Krishna s	201
49	Crypto Currency& Bitcoin: Scope & Future in India	Amit Vasant Agrawal 1 / Dr. Yogesh K. Agrawal 2	206
50	A Study of Client Satisfaction Towards Service Quality at Bharat Vikas Group India Limited	Dr Dileep Kumar Singh, / Dr. Ramprakash O. Panchariya Dr. Mukesh Bhojwani,	211
51	Need of Employee loyalty in improving organizational Productivity	Dr. Shital Mantri / Dr.Sheetal Waghmare / Vaishali Kale	214
52	पश्चिम विदर्भातील पर्यटन उद्योग राजगाराचे साधन	प्रा. शाम किसनराव तंत्रपाळे	219
53	वरुड शहरातील लघु उद्योगातून आर्थिकदृष्ट्या सक्षम अर्थव्यवस्था - एक विवेचनात्मक अध्ययन	ज्ञालेल्या महिला: एक प्रा लुम्बिनी हरिदास गणवीर	224
54	रोकड विरहीत व्यवहार व भारतीय अर्थव्यवस्था - एक विवेचनात्मक अध्ययन	डॉ. विष्णु एकनाथ घुमटकर	230
55	महिला सक्षमीकरण आणि महिलांचा राजकीय सहभाग	प्रा. रमेश एकनाथ भारुडकर	234
56	महिला सक्षमीकरण आणि बचत गट	प्रा.वैशाली तु. गोरे	238
57	वस्तू व सेवा कर आणि ग्राहक	डॉ. आनंद गोमाजी चव्हाण	241
58	भारत और अंतर्राष्ट्रीय व्यापार	प्रा.डॉ.नीता नंदलाल तिवारी	246
59	'मेक इन इंडिया'चे धोरणात्मक महत्त्व - भारतीय अर्थव्यवस्थेला सक्षम करण्यासाठीची मोहीम	प्रा.कविता किसन भोये	250
60	प्राणायामाचे महत्त्व	प्रा. डॉ. चंद्रशेखर ब. कडू	256
61	महिला साक्षरता : एक अवलोकन	प्रा. डॉ. आमले समाधान साहेबराव	259
62	भारतात डिजिटल मार्केटिंग उद्योगाची वाढ	प्रा. डॉ. अमोल सतीश राजूत	262
64	भारतातील वाढत्या बँकिंग घोट्यांच्या आणि त्यांच्याकारणांचे अध्ययन	डॉ. संजय पी. काळे	266
65	भारतातील शाश्वत विकास आणि हवामान बदलावर शासनाच्या प्रगतीचे अध्ययन	डॉ. राधेशाम पिलाजी चौधरी	270
66	व्यवसाय आणि आर्थिक माहितीच्या लेखा आणि अंकेक्षण मध्ये रोबोटिक्सलेखांकनाची भूमिका	प्रा. डॉ. पी. बी. खर्चे	275



67	ई- बाजारपेठ	डॉ. अनिल श्री. खांडेकर	281
68	पर्यावरण आणि व्यवसाय	डॉ. शर्मिष्ठा कुळकर्णी	285
69	क्रिप्टो करन्सी आणि बिटकॉइन	प्रा.गजानन य.वानखडे	288
70	कोविड पूर्व आणि नंतर : भारतातील कामकाजाच्या हायब्रीड पद्धतीचा उगम कौस्तुभ चंद्रवदन इंगळे		291
71	पंचायतराज व्यवस्था आणि महिला सक्षमीकरण	जे. व्ही. निकाळजे	297
72	महिला सक्षमीकरण	डॉ. विठ्ठल गोपा चव्हाण	300
73	भारतीय संविधान व मानवी हक्क : एक समाजशास्त्रीय अध्ययन डॉ. पदमानंद मनोहर तायडे		304
74	माहिती-तंत्रज्ञान : आव्हाने व मर्यादा	Asso. Prof. Sunil Dhere	309
75	डिजिटल मार्केटिंगचे फायदे व तोटे	प्रा. डॉ. रुपेश एम कुन्हेकर	312
76	जी.एस.टी. आणि भारतीय अर्थव्यवस्था GST & Indian Economy Sunil Laxman Mali		314
77	मेक इन इंडिया: भारतीय अर्थव्यवस्था	प्रा.डॉ. दयाळू किसन राठोड	321
78	मानवी अधिकार आणि त्या समोरील आव्हाने	प्रा. नितीन माणिकराव बिहाडे	326
79	मानवी अधिकारांची आंतरराष्ट्रीय स्तरावरील दशा व दिशा प्रा. अरुण मुकुंदराव शेळके		328
80	सामाजिक अंकेक्षण: मनरेगा अंतर्गत अंमलबजावणी व आव्हाने प्रा. डॉ. भालचंद्र देशमुख		330
81	कॅश लेसव्यवहार एक दृष्टीक्षेप	प्रा.विकास का.देशमुख	335
82	ईकॉमर्स विपणनातील आधुनिककल	प्रा. डॉ. जया सवाईथूल	338
83	क्रिप्टोकरन्सी डिजिटल किंवा आभासी चलन	प्रा.डॉ. निलम छंगाणी	344
84	महाराष्ट्र राज्य परिवहन महामंडळाच्या कर्मचाऱ्यांच्या कार्य-जीवन संतुलन व कार्य ताण परिणामाचे चिकित्सक अध्ययन- विशेष संदर्भ रायगड जिल्हा. आम्रपाली सुरेश जाधव / प्राचार्य डॉ. सुषमा राजीव हसबनीस		350
85	उच्च शिक्षणाचे बदलते स्वरूप	डॉ.विजय एच.नागरे	356
86	महिला सक्षमीकरण	प्रा. कु. शुभांगी सुरेशराव ढगे	359
87	व्यवसायाची सामाजिक जबाबदारी	डॉ. के. जी. राजपूत	362
88	कोरोना महामारीचा भारतीय अर्थव्यवस्थेवरील परिणाम प्रा.डॉ. गजानन बन्सीलाल बनचर		365



89	शेतीच्या विकासात स्त्रियांची भुमिका आणि समस्या Dr. V.L.Bhangdiya/Ku. Komal Suganchandji Taori	367
90	महिला सबलीकरण प्रा.सौ.सुषमा सु.जाजु	373
91	बँकिंग क्षेत्रात सायबर सुरक्षा हल्ले: उदयोन्मुख सुरक्षा आव्हाने आणि धोके प्रा. माणिकराव महागूजी कवरके	376
92	संस्कृतसाहित्यातील स्त्रियांची सक्षमता डॉ. जयश्री सकळकळे	382



Innovative Ways to Teach Chemistry: A Case Study

D.S. Hedao^{1*}, R.P.Rahate², M.P.Wadekar³

¹Asst. Professor, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, Email: dshascc@gmail.com

²Asst. Professor, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara

³Joint Director, Higher Education, Govt. of Maharashtra, Amravati Division, Amravati

Abstract:

Teaching any subject in inspiring, innovative and creative manner is the need of time. Various authorities like UGC, NAAC focus on Teaching, Learning and Evaluation to great extent. In addition to classroom teaching if we inculcate the subject in creative way then students can understand it and remember it and can do application of it in better way.

Keywords: Teaching Method, Innovative Activities, Learning, Evaluation.

Introduction:

Chemistry is recognized from the scientific community as a 'central science', since it connects different disciplines such as biology and medicine, nanoscience and material science.^{1,2} Traditional teaching method, static textbook, lack of interactivity and difficulty in visualization of the abstract chemical concepts makes the subject chemistry less interesting.³

It is established fact that well-implemented innovative learning material is effective to improve the students' competence; learning outcome in experimental class is found higher than that in control class; the guided task in the learning package facilitates the students to learn the selected Chemistry topic independently which in turn shifts student learning style from lecturer-oriented to student-oriented; the guided task not only made the students be familiar with searching for scientific documents to complete the given tasks but also improve the students' ability to write and organize their assignments.⁴ Improving students competence to provide appropriate knowledge and skills to deal with professional works becomes a challenge in education nowadays.⁵

Taking into consideration syllabus of undergraduate Chemistry various activities are planned and implemented. The Arts, Science and Commerce College, Chikhaldara has developed the concept of teaching the subject Chemistry in innovative manner. Every year Department of Chemistry organizes different competition related to subject in which students take part in enthusiastic manner.

Poster Presentation:

During the academic year 2015-2016, Poster Presentation Competition was organized for all the students of B.Sc.III(S5) in the subject Chemistry. In this theme of competition was scientist. Total 22 students participated in this competition.⁶ All the students choose different scientists like C.V. Raman, Rutherford, Thomas Edison, Homi Bhabha, D Broglie, Venkatraman Ramakrishnan, Dalton, Marie Curie, Lord Kelvin, Dr.A.P.J. Abdul Kalam, Mendeleev etc for their posters. The students made posters in different manner. Posters were put on display in campus. All the students of the college watch these posters and got inspiration to participate in such activities when their turn comes. In the afternoon, through the panel 03 judges all posters and presentation were evaluated and top three students were awarded with prizes. We found students were very much happy for being the part of this activity.

Periodic Table Poster Competition:

During the academic year 2016-2017, Poster Competition was organized for all the students of B.Sc.II(S4) in the subject Chemistry. In this theme of competition was Periodic Table. Total 44 students participated in this competition.⁷ In this competition as per the theme students choose different sections of periodic table to be focus on. The different sections of focus was d-block, 3d-series, halogens, noble gases, 5d-series, s-Block elements, Carbon family, Oxygen family, Boron family, p-Block element,

ML



Modern form of periodic table etc. Most of the posters were very very beautiful, colourful and magnificent. Some of the students use three dimension effects to present their drawing of posters. On watching all the posters we came to conclusion that students are more creative and imaginative than we ever think about them.

Element Presentation:

During the academic year 2017-2018, Element Presentation Competition was organized for all the students of B.Sc.II(S4) in the subject Chemistry. The students were asked to prepare T-shirts with the symbol and name of an element printed on it. The students discussed among themselves and choose elements so that they all get different elements. On the day of presentation students were asked to wear these T-shirts for full day in the college. Presentation was in afternoon session till then all the students of the college were curious about these kind of T-shirts. Presentation was organized in open space so that not only students of B.Sc.II(S4) can see the presentation but all the students can watch the activity. Now, student present himself/herself as though he/she is the element printed on his/her T-shirt. As the presentation moves on students started enjoying the presentation very much. All the students present the elements in very unique, enjoyable and beautiful manner that we can not imagine. This activity proved to be very innovative. Total 46 students took part in this activity.⁸ On listening the element presentation we came to conclusion that students are more creative and artistic than we ever think about the them.

Geometry Representation Using Balloons:

During the academic year 2018-2019, Geometry Representation Using Balloons Competition was organized for all the students of B.Sc.II(S4) in the subject Chemistry. The students were asked to select any geometry/structure of their interest. The students discussed among themselves and choose geometry so that they will cover all the different geometries.

The students were asked to use balloons to present geometries. On the day of presentation students brought their balloon models of geometries from their place of stay. All those who saw these models were curious about it. Presentation was in afternoon session till then all the students of the college were curious about these kinds of geometry models. Presentation was organized in open space so that not only students of B.Sc.II(S4) can see the presentation but all the students can watch the activity. As the presentation moves on students started enjoying the presentation very much. All the students present the geomerty in very distinctive, agreeable and striking manner that no one can imagine. This activity proved to be very innovative. Total 44 students took part in this activity.^{9,10,11} On listening and watching the geometry presentation we came to conclusion that students are more innovative and imaginative than we ever think about the them.

Phytochemical Investigation of Medicinal Plants:

During the academic year 2019-2020, Phytochemical Investiation of Medicinal Plant Competition was organized for all the students of B.Sc.II(S4) in the subject Chemistry. The students were asked to select any medicinal plant of their liking. The students discussed among themselves and choose plant so that they all get different plant. All the students were provided a format for phytochemical investigation of medicinal plant. The format includes common name of plant, botanical name, family, morphology, phytochemical present, uses etc. All students brought sapling of the selected plant in the college for presentation. All students are made to present their findings and knowledge about the plant as if they themselves are plants. Students have done presentation enthusiastically. Evaluation of the presentation was done with the criterion having titles such as presentation, correctness of data, plant knowledge, questions and answers, time management and script. The prizes were awarded to top two students. Total 36 students took part in this activity.¹²

Conclusion:

The students took part in these innovative activities viz. Poster Presentation, Element Presentation, Geometry Representation Through Balloon, Phytochemical Investigation of Medicinal Plants, Poster Making Competition enthusiastically. During the process of activities students shows keen



interest to better their performance. After completion of activities students always asked for such activities in regular manner. Considering the interest and enthusiasm of students we are doing different kinds of innovating activities to teach chemistry.

Acknowledgment:

Authors are thankful to The Principal, Arts, Science and Commerce College, Chikhaldara for giving permission to use the data.

References:

01. Domenici V, *Educ. Sci.*, 12, (2022), 30.
02. Mehlich J, Moser F, Vantiggelen B, Campanella L, Hopf H, *Chem. A Eur. J.*, 23, (2017), 1210.
03. Hsiung W Y, *Int. J. Inter. Mob. Tech.*, 12(7), (2018), 86.
04. Situmorang M, Sinaga M, Purba J, Daulay S I, Simorangkir M, Sitorus M, Sudrajat A, *J. Baltic Sci. Edu.*, 17(04), (2018), 535.
05. Marudut S, *Ind. J. Pharm. Edu. Res.*, 53 (1), (2019), 28.
06. Notice Book, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, (2015), 01.
07. Notice Book, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, (2017), 19.
08. Notice Book, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, (2018), 36.
09. Notice Book, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, (2019), 51.
10. *Chemistry Shikawnyasathi Balloon Models Cha Wapar, Punyanagari Daily Newspaper*, Page No: 2, Date: 08-03-2019.
11. *Shikshanacha Navinyapurna Upakram- Chemistrichya Vidhyarthyanne Ballon Modalschya Madhyamatun Mahiti, Adyayan Samachar Daily Newspaper*, e-edition, Date: 07.03.2019.
12. Notice Book, Department of Chemistry, Arts, Science and Commerce College, Chikhaldara, (2020), 67.