



CHEM NEWS Issue 10



A Newsletter from the Department of
Chemistry, VNIT Nagpur, 2022, Issue 10

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DOWN TO CHEMISTRY...

Message from HoD's Desk...



Welcome to the Department of Chemistry, VNIT Nagpur! We, the Department of Chemistry, feel our enthusiasm to publish the 10th issue of our departmental newsletter, "**CHEM NeWS**." I, as a head of the department would like to thank all the faculty members, non-teaching staffs and students for their limitless support and sincere efforts for the betterment and development of department. On this occasion, I congratulate all the team members of the editorial board for bringing up this issue in a better shape.

Overview of the Department...

Department of Chemistry has started the journey from the inception of the institute, initially it has been serving to cater the need of engineering students of various branches. The Department started new program for undergraduate (B.Tech.) in Chemical Engineering in the year of 2006. Later on, the post-graduation program (M.Sc.) in Chemistry for two years duration was commenced in the year of 2012. More than sixty Ph.D. degrees have been awarded till 2019. At present thirty students are pursuing their research work to attain their doctoral degree. The highly motivated students, who understand the research dynamics and upgrade their skills, are strengthening the department's back bone. In their curriculum they are encouraged to take part in different projects to supplement theoretical knowledge with practical experiences. In order to interact with the outside world, the department has active collaboration with the academic as well as research organizations in India and abroad. The department is organizing Continuous Educational Events like STTP courses, Seminars, and conferences. The curriculum is taught by the distinguished faculty members with the combination of academic excellence and diverse research exposure in working different areas of science and technology with complete dedication and commitment. The research field includes Organic synthesis, Solid state chemistry, Crystal engineering and Nano-materials, Polymers and elastomeric composites, Inorganic Chemistry, Photo-catalysis and Bioinorganic Catalysis, Biophysical Spectroscopy and Photobiology, Chemical Thermodynamics, Resource Recovery and Environmental remediation, Bio-catalysis and Organic Chemo-Sensor, Electro-analytical Chemistry. The faculty members of the department have been awarded various national and international research fellowships. They have also authored many books and participated in national and international conference. The publication of their research works in various SCI index journals are the regular activities of the Department. Many R&D projects are being funded by different funding agencies viz. SERB, DST, MHRD, UGC, BRNS, CSIR, etc. Department has well-equipped laboratories with modern instrumental facilities and has been recognized by DST-FIST Sponsored Department since 2017!

FACULTY MEMBERS

DR. ANUPAMA KUMAR (HoD)
DR. SURESH S. UMARE
DR. JAYANT D. EKHE
DR. SUJIT K. GHOSH
DR. RAMANI V. MOTGHARE
DR. CHAYAN DAS
DR. ATUL V. WANKHADE
DR. UMESH R. PRATAP
DR. SANGESH P. ZODAPE
DR. SUSANTA K. NAYAK
DR. S. LAXMI GAYATRI
DR. ABHISHEK BANERJEE
DR. SANDIPAN HALDER

Recent Publications...

1. "Antioxidant analysis of ultra-fast selectively recovered 4-hydroxy benzoic acid from fruits and vegetable peel waste using graphene oxide based molecularly imprinted composite" RS Das, A Kumar, AV Wankhade, SA Mandavgane; Food Chemistry (2021), 131926.
2. "ZrO₂@ chitosan composite for simultaneous photodegradation of three emerging contaminants and antibacterial application" RS Das, A Kumar, AV Wankhade, DR Peshwe; Carbohydrate Polymers 278, (2022), 118940.
3. "Cryptic solvation dynamics of potential antineoplastic Azapodophyllotoxin: Short and long range charge transfer and distinct H-bonding motifs demystify its swinging emissive behaviour" S. Gupta, K. Ganorkar, N. Sehra, A. Kumar, S. K. Ghosh, Journal of Photochemistry & Photobiology A: Chemistry, 2022, 422, 113556.

Invited Talks...

Dr. Anupama Kumar has delivered an invited talk entitled "Greener composite for tertiary treatment of multiple emerging contaminants" in the 2nd Virtual International conference on Molecules to Materials, MTM-2021, Organized by the Department of Chemistry SVNIT, Surat on 18th December, 2021.

Participation in National Conference...

Dr. Anupama Kumar has Participated in the ATAL FDP on "Recent Trends in Nonthermal Processing: Prospects and challenges" from 4th-8th October, 2021. FDP was organized by the Indian Institute of Food Processing Technology.



Conference Organized...

Department of Chemistry, VNIT organized a webinar on **12th November, 2022** as a part of "Commemoration of 75 years of Indian independence" popularly known as "Azadi Ka Amrit Mahotsav". **Dr. Phiroz Dungore**, Principal Scientist, Jawaharlal Nehru Aluminium Research Development and Design Centre (JNARDDC), Nagpur has delivered a talk entitled "Aluminium - From Mine to Metal". The program has been coordinated by **Dr. Chayan Das**.



Department of Chemistry, VNIT organized a symposium on **16th of November, 2021** as a part of "Commemoration of 75 years of Indian independence" popularly known as "Azadi Ka Amrit Mahotsav". **Padma Shri Professor Vinod K. Singh** from the Department of Chemistry, IIT Kanpur, INDIA has delivered a talk entitled "Asymmetric Organocatalysis (Chemistry Nobel Prize 2021)". The program has been coordinated by **Dr. Sandipan Halder**.



Students Joined for Doctoral Program in the Department...

- **Mr. Ankit Verma** has taken admission for PhD program under the guidance of **Dr. Umesh R Pratap**. He has completed M.Sc. from VNIT Nagpur in 2020.
- **Mr. Omkar Dash** has taken admission for PhD program under the guidance of **Dr. Susanta Kumar Nayak**. He has completed M.Sc. from VNIT Nagpur in 2021.
- **Ms. Manisha Gopal Verma** has taken admission for PhD program under the guidance of **Dr. Anupama Kumar**. She has completed M.Sc. from Rashtrasant Tukdoji Maharaj Nagpur University in 2017.
- **Ms. Ankita S. Chandak** has taken admission for PhD program under the guidance of **Dr. Sangesh P. Zodape**. She has completed M.Sc. from VNIT Nagpur in 2019.



Editorial Board

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