

# **Amolakchand Mahavidyalaya, Yavatmal.**

## **REPORT**

**On**

### **Webinar on the latest developments in Green Chemistry.**

A “Webinar on the latest developments in Green Chemistry” was organized by the Department of Chemistry, Amolakchand Mahavidyalaya, Yavatmal in collaboration with IGNOU, RC Nagpur, and Royal Society of Chemistry, Western Section on 24 July 2020. The webinar was arranged in order to provide theoretical and conceptual knowledge on the current advances in Green Chemistry to the faculties, research scholars, and students involved in the active research from various colleges of the region and university. A total of 528 students have registered for the webinar, 79 of them participated through Zoom, and 388 have participated through YouTube. Total attendees are **467**. Dr. Suvarn Kulkarni from IIT Bombay, Professor S. Chandrasekaran from IISc Bangalore, and Professor Syam Sen Gupta from IISER Kolkata are the resource persons for the webinar. Dr. P. Shivswarup from IGNOU Nagpur and Dr. Rammanohar Mishra congratulated Dr. Prashant Muskawar and Dr. Madhuri Bhade for successfully organizing the event.

#### **Registration Link –**

<https://forms.gle/fVkn3MGsBGoctbYi8>

#### **Webinar Link-**

<https://us02web.zoom.us/j/82748484559?pwd=VXJiN1BnUTY3SlczUk0yb1NYRTRV3dz09>

#### **Feedback Link -**

[https://docs.google.com/forms/d/1LYf\\_8QQJFrCITSrdXB8\\_Oi0W8wjRli9IAgUhSZR4MDE/edit](https://docs.google.com/forms/d/1LYf_8QQJFrCITSrdXB8_Oi0W8wjRli9IAgUhSZR4MDE/edit)



## Schedule of the webinar:



The poster features a green background with a grid pattern. At the top, there are logos for IGNOU, Amolakhand Mahavidyalaya, and the Royal Society of Chemistry. The text in the center reads: 'Amolakhand Mahavidyalaya, Yavatmal in Association with Royal Society of Chemistry (RSC) West India Section and Indra Gandhi National Open University, Nagpur Regional Centre Presents a webinar on LATEST DEVELOPMENTS IN GREEN CHEMISTRY Friday 24<sup>th</sup> July 2020'. Below this, the schedule is listed: 10 am: Introduction; 10:15 am: CHEMISTRY FOR SUSTAINABLE DEVELOPMENT by Prof. S. Chandrasekaran; 11:00 am: GREEN CHEMISTRY IN CARBOHYDRATE SYNTHESIS by Prof. Suvam Kulkarni; 11:45 am: BIO-INSPIRED CATALYSIS FOR A SUSTAINABLE FUTURE by Prof. Sayam Sen Gupta. Small portraits of the speakers are included next to their names.

## लोकमत

# प्रदूषणाला पायबंद : कोलकाता, बंगलोरच्या तज्ज्ञांचे मार्गदर्शन, सर्वांनाच ऑनलाईन प्रवेश अमोलकचंदमध्ये राष्ट्रीय कार्यशाळा

लोकमत न्यूज नेटवर्क

**यवतमाळ :** येथील अमोलकचंद महाविद्यालयाच्या रसायनशास्त्र विभागातर्फे २४ जुलै रोजी 'हरित रसायनशास्त्रातील आधुनिक विकास' या विषयावर ऑनलाईन राष्ट्रीय कार्यशाळा आयोजित करण्यात आली आहे. रॉयल सोसायटी ऑफ केमिस्ट्री-पश्चिम विभाग आणि इंदिरा गांधी राष्ट्रीय मुक्त विद्यापीठ यांच्या सहकार्याने सकाळी १० वाजता कार्यशाळा होणार आहे. यासाठी नोंदणी करणे आवश्यक आहे. वातावरणात दिग्मन येत

### सहभागी नागरिकांना मिळणार प्रमाणपत्र

भारतीय विज्ञान शिक्षण व संशोधन संस्था कोलकाताचे डॉ. सवन सेनगुप्ता, भारतीय विज्ञान संस्था बंगलोरचे डॉ. एस. चंद्रसेकरण, भारतीय तंत्रविज्ञान संस्था मुंबईचे डॉ. सुवर्ण कुलकर्णी आदी या कार्यशाळेत मार्गदर्शन करतील. निःशुल्क असलेल्या या कार्यशाळेत विद्यार्थी, शिक्षक, नागरिकही सहभागी होऊ शकतात. सर्व सहभागींना आयोजकांकडून ई-प्रमाणपत्र दिले जाणार आहे.

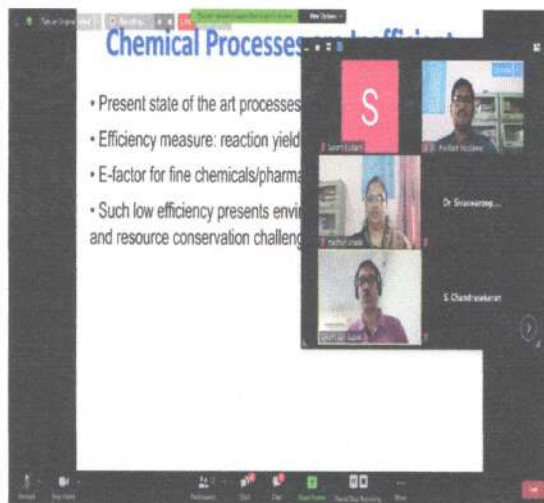
असलेल्या ग्लोबल वॉर्मिंगवर मात करण्यासाठी हरित रसायनशास्त्राची संकल्पना सर पोल टी. आनासटास यॉनी १९९१ मध्ये मांडली. यानंतर या विषयावर यंथे संशोधन झाले. या संकल्पनेत सांगितल्याप्रमाणे

प्रयोगशाळेत रासायनिक प्रक्रिया होत असताना पर्यावरणाचा समतोल राखण्यास मदत होते आणि घातक पदार्थ तंत्रेच नष्ट होते. यामुळे पर्यावरण प्रदूषित होत नाही. आण्यिक प्रदूषण राखण्यामध्येमुद्दा हरित

रसायनशास्त्राची मदत होते. या संकल्पनेतील ओळख आणि व्यामधील नवीनतम बदलांची जाणीव व्हावी याकरिता ही कार्यशाळा घेण्यात येत आहे. कार्यशाळेत सहभागी होण्याची विनंती प्राचार्य डॉ. राममनोहर मिश्रा, इंदिरा गांधी राष्ट्रीय मुक्त विद्यापीठ नागपूरचे केंद्रीय संचालक डॉ. पी. शिवस्वरूप, डॉक्टर रॉयल सोसायटी ऑफ केमिस्ट्री पश्चिम विभागाच्या डॉ. दीपा खुशलानी यांनी केली आहे. अधिक माहितीसाठी रसायनशास्त्र विभागाचे डॉ. प्रशांत मुस्कावार, डॉ. मायुरी भादे यांच्याशी संपर्क करावा, असे कळविले आहे.

Hello Yavatmal!  
Page No. 4 Jul 13, 2020  
Powered by: erelego.com









**National Level Webinar on**  
**LATEST DEVELOPMENTS IN GREEN CHEMISTRY**  
 Organised by  
**Amolakchand Mahavidyalaya, Yavatmal**  
 in association with  
**Royal Society of Chemistry (RSC) West India Section and**  
**Indira Gandhi National Open University (IGNOU) Nagpur Regional Centre**

**CERTIFICATE**

This is to certify that **RUPAL M. KUBAVAT** of **Indira Gandhi National Open University (IGNOU)** has participated in the online National Level Webinar on "LATEST DEVELOPMENTS IN GREEN CHEMISTRY" organised by Department of Chemistry, Amolakchand Mahavidyalaya, Yavatmal in Association with Royal Society of Chemistry (RSC) West India Section and Indira Gandhi National Open University (IGNOU) Nagpur Regional Centre on 24<sup>th</sup> July 2020.

  
**Dr. B. A. Mankar**  
 Organiser  
 Amolakchand Mahavidyalaya,  
 Yavatmal

  
**Dr. P. Shivswaroop**  
 Organiser  
 INGOU, Regional Director,  
 Nagpur Regional Centre,  
 Nagpur

  
**Prof. Suvarn S. Kulkarni**  
 Organiser  
 Department of Chemistry  
 Indian Institute of Technology Bombay  
 West India Section (RSC)

  
**Dr. P. N. Muskawar**  
 Convener  
 Dept. of Chemistry  
 Amolakchand Mahavidyalaya,  
 Yavatmal





Vidya Prasad Mandal's  
**Amolakhchand Mahavidyalaya, Yavatmal**  
 in association with  
 Royal Society of Chemistry (RSC) West India Section and  
 Indira Gandhi National Open University (IGNOU) Nagpur Regional Centre

Organizing

National Level Webinar on

## LATEST DEVELOPMENTS IN GREEN CHEMISTRY

NOT just a debate solution. BUT an alternate necessity.

Friday, 24th July 2020 at 10.00 am



### Resource Persons



**PROF. S. CHANDRASEKARAN**  
 Dept. of Chemistry IISc Bangalore  
 Topic: Chemistry for Sustainable Development

Chemistry is both a central science and an enabling science. Chemistry plays a key role in conquering diseases, solving energy problems, solving environmental problems, providing the discoveries that lead to new industries, and developing new materials and new technologies. To make an impact, Chemistry needs creativity and has to address issues of sustainability and human wellbeing. The concept of sustainable development emerged in the 1980s in response to a growing realization of the need to balance economic and social progress with concern for the environment and stewardship of natural resources. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The chemistry for sustainable development is referred to as Green Chemistry. And for chemists, it is becoming increasingly important to be green by applying the principles of green chemistry to all facets of chemical sciences, basic and applied research, production and education. In this lecture the historical development of the concept of Green Chemistry, principles of green chemistry and application to a few practical problems with examples would be discussed.

**PROF. SUVARN KULKARNI**  
 Dept. of Chemistry IIT Bombay  
 Topic: Green Chemistry in Carbohydrate synthesis



Over the last century, science and technology have given humanity an immense and unprecedented power over the nature of the ecosystem. Unfortunately, the embrace of our new-found powers has led to a major degradation of the ecosystem. In our increasingly crowded world, common chemicals that once seemed harmless no longer do. To build a sustainable future, chemists have to design technology that not only eliminates hazards from chemical products but also develop new chemistry for industrially important chemical transformations, safe energy and renewable feedstocks. In this talk I will show how simple and natural feedstock starting materials (i.e. nontoxic sugars such as Mannose and Threulose) can be transformed into biologically important complex glycoconjugates via chemical synthesis keeping in mind the principles of green chemistry. I will mainly focus on use of regioselective reactions, minimal protecting groups, waste minimization, using less hazardous reagents, catalytic reactions, and one pot transformations.



**PROF. SAYAM SEN GUPTA**  
 Dept. of Chemistry IISER Kolkata  
 Topic: Biocatalyzed Catalysts For a Sustainable Future

**Abstract:**  
 Bacterial glycoconjugates are comprised of rare D and L deoxy amino sugars, which are not present on the human cell surface. This peculiar structural difference allows discrimination between the pathogen and the host cell and offers avenues for target specific drug discovery and carbohydrate based vaccine development. However, they cannot be isolated with sufficient purity in acceptable amounts, and therefore chemical synthesis is a crucial step toward the development of these products. We recently established short and convergent methodologies for the synthesis of orthogonally protected bacterial D and L deoxy amino hexopyranoside and glycosamine building blocks starting from cheaply available and naturally occurring D mannose and L-rhamnose. The output protocols rely on highly regioselective nucleophilic displacements of triflates. These procedures have been applied to the synthesis of various bacterial glycoconjugates.

Similarly, threulose is an important naturally occurring sugar. Threulose containing glycoconjugates are mainly present in MTB and their synthesis is important for studying their role in MTB virulence. In this talk I will show how simple and natural feedstock starting materials (i.e. nontoxic sugars such as Mannose and Threulose) can be transformed into biologically important complex glycoconjugates via chemical synthesis keeping in mind the principles of green chemistry. I will mainly focus on use of regioselective reactions, minimal protecting groups, waste minimization, using less hazardous reagents, catalytic reactions, and one pot transformations.

**Workshop Details:**  
 Date: 24th July 2020  
 Time: 10:00 AM to 12:00 PM  
 Registration Link: <https://forms.gle/7BY9LUDnSUKN2G7E2>  
 Web: <http://www.iamsc.org>  
 Email: [iamsc@iamsc.org](mailto:iamsc@iamsc.org)  
 WhatsApp: <https://chat.whatsapp.com/G969L7HMcCL3C5Ds13y8>  
 Facebook: <https://www.facebook.com/iamsc.1/>  
 YouTube: <https://www.youtube.com/channel/UC1Bt8eAuzW2zNtature-ygdu4w>

### Organizing Committee

#### Organizers

**Dr. Rammanohar Mishra**  
 Principal  
 Amolakhchand Mahavidyalaya,  
 Yavatmal

**Suvarn S. Kulkarni, Ph. D., FRSC**  
 Professor  
 Department of Chemistry,  
 Indian Institute of Technology  
 Bombay  
 West India Section (RSC)

**Dr. P. Shivaramoap**  
 IGNOU Regional Director,  
 Nagpur Regional Centre,  
 Nagpur

**Dr. Deepa Khushfekar**  
 Professor in Molecular Chemistry,  
 Department of Chemistry,  
 IITB, Mumbai  
 Kulkarni Mumbai

#### Co-Chair

**Dr. Prashant N. Mudkawa**  
 Dept. of Chemistry  
 Amolakhchand Mahavidyalaya,  
 Yavatmal

#### Organizing Secretary

**Dr. Madhuri W. Bhade**  
 Dept. of Chemistry  
 Amolakhchand Mahavidyalaya,  
 Yavatmal

For more information, contact us:

Contacts: Dr. Rammanohar A. Mishra: 9890047278, rammanohar.mishra@gmail.com  
 Dr. Prashant N. Mudkawa: 9423428016, p.mudk@iamsc.org  
 Dr. Madhuri W. Bhade: 9423832765, madhuri.bhade@gmail.com



*(Signature)*  
**(Dr. Rammanohar A. Mishra)**  
 Principal  
 Amolakhchand Mahavidyalaya,  
 Yavatmal