

**Brief report of "NATIONAL WEBINAR" NWFM-2021**

National Webinar on "Functional Materials" organized by Society for Promotion of Material Science Nagpur and Department of Chemistry, Jagat Art's, Comm. & I. H. P. Science College Goregaon Dist. Gondia. On Tuesday, 21st February 2021 at 10.00 am Via Zoom Meet and Live Streaming on YouTube. Registration Link: <https://forms.gle/J1ikNQRcQTAA6tW8A>. No Registration Fees for joining the National Webinar. All registered participants got E-Certificate after attending the session. Submission of Feedback Form was compulsory to get the certificate. Telegram Group for more update: <https://t.me/joinchat/HMSqzIvx8H-ej02V> Or WhatsApp Group: <https://chat.whatsapp.com/FGs1dFkKu1qDzkdffKRi1m>. Webinar's YouTube link: <https://youtu.be/2jYJrs2CDRQ>. About 2000 participant from various universities of India were benefitted by conference.

In Inaugural Session, Welcome Address by Dr. W. B. Gurnule, Convenor, Secretary, Society for Promotion of Material Science, Nagpur, Introductory Speech by Dr. N. Y. Lanje, Principal, Jagat Arts, Comm. And I. H. P. Science College Goregaon, Address by Guest of Honor by Dr. K. P. Kariya, Principal, V. M. V. College, Nagpur, Presidential Address by Prof. S. S. Umare, President, Society for Promotion of Material Science, Nagpur and Vote of Thanks by Dr. Ratiram Choudhary.

In Technical session, Speaker 1, Dr. Vivek Polshettiwar, Associate Professor G, Department of Chemical Science, Tata Institute of Fundamental Research, Mumbai delivered a talk 'Tuning the Function of Nanomaterials without Functionalization'. Speaker 2, Prof. N. B. Singh, Department of Chemistry, Research and Technology Development Centre Sharda University, Greater Noida delivered a lecture on 'Multifunctional Green Nanomaterials and their Applications' and session presided over by Prof. N. S. Gajbhiye, Honorary President, and SPMS Nagpur. Dr. S. S. Rahangdale, Co-Convenor proposed a vote of thanks.

**NATIONAL WEBINAR**  
On  
**FUNCTIONAL MATERIALS**

on the Eve of Birth Anniversary of  
**Prof. R. B. Kharat**  
NWFM-2021  
Organized by  
Society for Promotion of Material Science, Nagpur and  
Jagat Arts, Comm. & I. H. P. Science College,  
Goregaon, Dist Gondia

**Patron**

- Date -  
**21st February 2021**  
- Time -  
10.00 am on Zoom and  
Live streaming on  
YouTube

**SPEAKERS**

<b>Prof. N. B. Singh</b> Sharda University Greater Noida	<b>Vivek Polshettiwar</b> Associate Professor G Department of Chemical Science Tata Institute of Fundamental Research, Mumbai

**ORGANIZERS**

<b>Prof. S. S. Umare</b> Convener NWFM-2021 President Society for Promotion of Material Science	<b>Prof. W. B. Gurnule</b> Convener NWFM-2021 Secretary Society for Promotion of Material Science	<b>Dr. N. Y. Lanje</b> Principal Jagat Arts, Comm. & I. H. P. Science College, Goregaon	<b>Dr. S. S. Rahangdale</b> Co-Convenor Jagat Arts, Comm. & I. H. P. Science College, Goregaon

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**Date - 21st February 2021**

**INAUGURAL SESSION (10:00 to 10:20 am)**

<b>Welcome Address :</b>	<b>Dr. W. B. Gurnule</b> Convenor Secretary, Society for Promotion of Material Science, Nagpur
<b>Introductory Speech :</b>	<b>Dr. N. Y. Lanje</b> Principal, Jagat Arts, Comm. and I.H.P. Science College, Goregaon Dist. Gondia
<b>Address by Guest of Honor :</b>	<b>Dr. K. P. Kariya</b> Principal, V. M. V. College, Nagpur
<b>Presidential Address :</b>	<b>Prof. S. S. Umare</b> President, Society for Promotion of Material Science, Nagpur
<b>Vote of Thanks :</b>	<b>Dr. Ratiram Chaudhary</b>

**Technical Session (10.20 a.m. to 12 Noon)**

<b>SPEAKER I</b>	<b>Dr. Vivek Polshettiwar</b> Associate Professor G Department of Chemical Science Tata Institute of Fundamental Research, Mumbai	<b>Tuning the Function of Nanomaterials without Functionalization</b>	<b>10.20 to 11.10 am</b>
<b>SPEAKER II</b>	<b>Prof. N. B. Singh</b> Department of Chemistry Research & Technology Development Centre Sharda University, Greater Noida	<b>Multifunctional Green Nanomaterials and their Applications</b>	<b>11.10 to 12.00 Noon</b>

**Vote of Thanks...** **Dr. S. S. Rahangdale**

**Boucher & Schedule of Conference**

**INVITATION**  
**SOCIETY for PROMOTION of MATERIAL SCIENCE, NAGPUR**  
 and  
**Department of Chemistry, Jagat Art, Commers & IHP Science College Goregaon (Gondia)**  
 Cordially Invites you to attended the  
**Webinar Lectures on Functional Materials**  
 in memory of the  
 Founder President **Late Prof. R. B. Kharat**  
**Date - 21st February 2021**

SPEAKER	TOPIC	TIME
<b>Dr. Vivek Polshettiwar</b> Associate Professor G Department of Chemical Science Tata Institute of Fundamental Research, Mumbai	<b>Tuning the Function of Nanomaterials without Functionalization</b>	<b>10.20 to 11.10 am</b>
<b>Prof. N. B. Singh</b> Department of Chemistry Research & Technology Development Centre Sharda University, Greater Noida	<b>Multifunctional Green Nanomaterials and their Applications</b>	<b>11.10 to 12.00 Noon</b>

To be presided over by  
**Prof. N. S. Gajbhiye**  
 Honorary President, SPMS Nagpur.

<b>Prof. S. S. Umare</b> President SPMS	<b>Prof. W. B. Gurnule</b> Secretary SPMS	<b>Prof. N.S. Bhawe</b> Special Invitee
<b>Dr. K.P. Kariya</b> Principal, VMV College Special Invitee	<b>Dr. N. Y. Lanje</b> Principal Jagat College, Goregaon	<b>Dr. Ratiram Chaudhary</b> Executive Member SPMS
	<b>Dr. S. S. Rahangdale</b> Co-Convenor	

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**Certificate of Participation**

This is to certify that \_\_\_\_\_  
 of \_\_\_\_\_ has participated in  
 National Webinar on Functional Materials on the Eve of Birth Anniversary of Prof. R. B. Kharat on 21st  
 February 2021 organized by Society for Promotion of Material Science, Nagpur and Jagat Arts, Comm. &  
 I. H. P. Science College, Goregaon, Dist Gondia

  
 Prof. S. S. Umare  
 Co-ordinator, NWFM-2021  
 President  
 Society for Promotion of  
 Material Science

  
 Prof. Wasdeo B. Gurnule  
 Convenor, NWFM-2021  
 Secretary  
 Society for Promotion of  
 Materials Science

  
 Dr. N. Y. Lanje  
 Principal  
 Jagat Arts, Comm. & I. H. P.  
 Science College, Goregaon.

  
 Dr. S. S. Rahangdale  
 Co-Convenor  
 Jagat Arts, Comm. & I. H. P.  
 Science College, Goregaon.

### Certificate for Participation



Prof. N. S. Bhawe and Prof. N. S. Gajbhiye

### Invitation Letter of Conference




### Prof. W. B. Gurnule, Welcome speech

Contents of this Talk

**How to Design Nanomaterial, which can Capture & Convert CO<sub>2</sub> to Fuel?**

1. Perfecting Imperfection: Defective Nanosilica as Catalysts for CO<sub>2</sub> to Fuel Conversion  
(Proc. Natl. Acad. Sci. U.S.A. 2020, 117, 4383 and Nature Protocol, 2019, 14,2077)
2. Black Gold: Plasmonic Colloidsomes for Solar Energy Harvesting & CO<sub>2</sub> to Fuel Conversion  
(Chemical Science 2019, 10, 6674)
3. Solid Acids: Waste Plastic to Chemicals  
(Nature Comm. 2020, 11, 3828)





Dr. Vivek Polshettiwar, delivered a talk 'Tuning the Function of Nanomaterials without Functionalization'

Prof. N. B. Singh, delivered a lecture on 'Multifunctional Green Nanomaterials and their Applications'



Introductory speech by Dr. N. Y. Lanje



Vote of thanks by Dr. S. S. Rahangdale