

UGC - Human Resource Development Centre

Prof. S.J. Manjunath, B.E., M.B.A., Ph.D.

Director

No. : HRDC/

Ref. :

Manasagangothri
Mysuru - 570 006.
Karnataka, INDIA

Report of the 12th Refresher Course in Materials Science

The 12th Refresher Course in Materials Science was conducted by the UGC-Human Resource Development Centre, University of Mysore from 08-12-2020 to 21-12-2020. The Thrust Area/theme of the Refresher Course was "Industrial Minerals and Materials". The Course Co-ordinator was Prof. B.V. Suresh Kumar, Department of Studies in Earth Science, University of Mysore, Mysore. A total of 25 Participants attended the refresher course.

On the first day, first session, Instruction has been given to the Teacher-Participants, second session Prof. K.N. Prakash Narasimaha, Department of Studies in Earth Science, University of Mysore, Mysore discussed on "Industrial Minerals", third session Prof. Siddaramaiah, Department of Polymer Science and Technology, JSS University of Science & Technology, Mysore explained on "Nano Composites for Solar Energy Harvesting", fourth session Prof. G.V. Venkataramana, Department of Studies in Environmental Science, University of Mysore, Mysore spoke on "Industrial Pollution and Its Consequences". On the second day, morning, Dr. M.S. Vijay Kumar, Ramanujan Faculty Fellow, Visiting Fellow, TUFTS University USA, Department of Studies in Chemistry, University of Mysore, Mysore demonstrated on "Space Environment and Its Applications in Basic Science", third session Prof. K.N. Prakash Narasimha, spoke on "Industrial Minerals and Rocks", fourth session Dr. P. Madhusudan, Senior Research Scientist, Department of Materials Science, Southern University of Science and Technology, Shenzhen, P R China addressed on "Recent trends in Visible Light Driven Photocatalytic System for Environmental Remediation". On the third day, first session, Prof. S.K. Prasad, Head, Department of Civil Engineering, Vidyavardhaka College of Engineering, Mysore explained on "Mechanical Behaviour of Soil as Construction Material", second session Prof. Siddaramaiah, spoke on "Super Absorbents Hydrogels". Afternoon, On the third day of third and fourth session Dr. M.S. Vijay Kumar, delivered lecture on "Material Preparation Under Zero Gravity". On the fourth day, first

session Prof. K.N. Mohan, Department of Studies in Chemistry, University of Mysore, Mysore explained on "Corrosion Metals and Alloys", second session Prof. D. Nagaraju, Department of Studies in earth Science, University of Mysore, Mysore spoke on "Water Quality Parameters for Industrial Uses", third session Prof. M.R. Janardhan, Associate Professor & HOD, Department of Geology, Yuvaraja's College, University of Mysore, Mysore, addressed on "Constructional Geomaterials", fourth session Dr. P. Madhusudan, demonstrated on "Design and Fabrication of Carbon Based 2D Materials for Energy Conversion and Solar Hydrogen Generation". On the fifth day, first session Prof. P.K. Umesha, Department of Civil Engineering, Vidyavardhaka College of engineering, Mysore explained on "Sustainable Alternative Minerals in Construction Practices", second session Prof. D. Nagaraju, gave lecture on "Environmental Laws for Industries", third session Prof. G.V. Venkataramana, spoke on 'Industrial Omission and Its Impact on Air Quality'. On the sixth day, first session Prof. K.N. Mohan, explained on "Recent Development on Graphene Based Anti-corrosion Coating", second session Dr. N.S. Usha Prakash, Scientist, Malmed Research Foundation, Mysore delivered lecture on "Role of Minerals (Elements) in Metabolism", third session Prof. Manjunath Pattabi, Chairman, Department of Materials Science, Mangalore University, Mangalore demonstrated on "Preparation of Thin Films", fourth session Dr. P. Madhusudan, spoke on "Hydrothermal Technique for Tailoring Heterogenous Nanostructures for Efficient Solar Energy Conversion, Photocatalysis and Environmental Remediation".

On the second week, first day, morning, Prof. H.B. Manjunath, Chairman, Department of Studies in Sericulture, University of Mysore, Mysore gave information on "Silk Biomaterials and Its Applications", third session Dr. M.P. Sadashiva, Associate Professor, Department of Studies in Chemistry, University of Mysore, Mysore delivered lecture on "Organic Materials and Its Applications", fourth session Prof. G.V. Venkataramana, spoke on "Industrial Effluents and Control Measures". On the second day, morning, Prof. K.S. Venkatesh, Department of Sugar Technology, Sir M.V.P.G. Centre, University of Mysore, Tubinkere, Mandya demonstrated on "Sugar Industry". Afternoon, Prof. K.N. Prakash Narasimha, spoke on "Gem Minerals". On the third day, morning, Prof. Dinesh Rangappa, Programme Coordinator, Department of

Nanotechnology, Veshveshvaraiiah Technological University, Chikkaballapur delivered lectures on "Advance Nano Ceramic Energy and environmental Applications" and "vacancy Engineered Black Tio₂ & Its Carbon Nano Composite with Enhanced Photocatalysis Performance", third session Prof. Manjunath Pattabi, spoke on "Application of Thin Films", fourth session Prof. B.V. Suresh Kumar, Co-ordinator, explained on "Industrial Minerals and Materials". On the fourth day, morning, Prof. H.S. Yathirajan, UGC BSR Faculty Fellow, Department of Studies in Chemistry, University of Mysore, Mysore explained on "Crystal Structure Studies of Small Molecules", third session Dr. B.V. Mohan Kumar, moderated the "Participants Seminar-1". Prof. K.N. Mohan, evaluated the "Participants Seminar-2". On the fifth day, first session Prof. B.V. Suresh Kumar moderated the "Participants seminar-3". On the second and third session Prof. B.V. Mohan Kumar, evaluated the "Participants Seminar-4" and "Participants Seminar-5". On the last day, morning, Dr. Rajesh Kumar T, Associate Professor, Department of Biochemistry, JSS Medical College, JSS Academy of Higher Education & Research, Mysore spoke on "Biomaterial for Biomedical Application" and "Tissue Engineering or Regenerative Medicine".

As a part of the Refresher Course , the Online test was conducted in the afternoon followed by feed back from the participants.

In support to this report , the following Documents are attached.

1. Resource Persons' List
2. Teacher Participants' List
3. Seminar Schedule
4. Time Table
5. Group Photo

(Prof. S.J. Manjunath)

Director

DIRECTOR
UGC-Human Resource Development Centre
University of Mysore
Manasagangotri, Mysuru-570006

Recommendations of Committee towards allotment of courses for 2020-21 (RC/OP/STC etc.) under the scheme of HRDC

S.NO	NAME OF HRDC/RECOMMENDED PROGRAMMES BY THE COMMITTEE
5.	<p>UNIVERSITY OF MYSORE.</p> <p>1. Faculty Induction Programme - 04.</p> <p>2. Refresher Courses: Theme-LEARNING OUTCOMES AND COMPETENCES 10</p> <p>i) Commerce.</p> <p>ii) Languages, Literature & Cultural Studies (Kannada & Indian Languages).</p> <p>iii) History.</p> <p>iv) .Library & Information Science.</p> <p>v) Physical Education.</p> <p>Refresher Courses: Inter/Multi-disciplinary:</p> <p>vi) Cognitive Economics.</p> <p>vii) Quantum Biology.</p> <p>viii) Human Rights.</p> <p>ix) Materials Science.</p> <p>x) Teacher Educators: Learning outcomes and educational reform – Pedagogy, Assessment and Quality Assurance.</p> <p>3. Short Term Courses.</p> <p>i) “Research Methodology”</p> <p>ii) ‘Gender Sensitization’.</p> <p>iii) ‘Disaster Management’.</p> <p>iv) “Soft Skills’.</p> <p>4. Workshop. - 05.</p> <p>i) Leadership Development Programme 02</p> <p>ii) MOOCs, Online Courses & Open Educational Resources</p> <p>iii) E-content Development and Online Pedagogy</p> <p>iv) Interaction Programme for Ph.D. Research Scholars/Post-Doctoral Fellows</p>

**Address List of Resource Persons of the 12th Refresher Course in Material Science (Online)
From 08.12.2020 to 21.12.2020**

S.N	Name & Address of the Resource Persons	Contact No. & E-mail
1.	Prof. Midatala Rani Director, UGC-Human Resource Development Centre, University of Mysore, Manasagangotri, Mysore-570006.	Off : 0821-2419319 Res : Cell : Email : mallirani@yahoo.com
2.	Dr. M S Vijay Kumar Ramanujan Faculty Fellow, Visiting Fellow, TUFTS University USA, Dept. Of Studien in Chemistry, University of Mysore, Manasagangangotri, Mysore- 06	Off : Res : Cell : 7259366827 Email : vijay.sari@gmail
3.	Prof. Siddaramaiah Dept. of Polymer Science and Technology, JCE College of Engineering, JSS University, Manasagangotri, Mysore- 06	Off : Res : Cell : 9972095262 Email : siddaramaiah@gmail
4.	Prof. S.K. Prasad Prof. & Head, Dept. Of Civil Engineering, Vidyavaradhaka College of Engineering, Mysore- 570002	Off : Res : Cell : 9449621994 Email : skprasad@vvce.ac.in
5.	Prof. P.K. Umsha Dept. Of Civil Engineering, Vidyavardhaka College of Engineering, Mysuru- 570002	Off : Res : Cell : 9445545842 Email : drumeshapk@vvce.ac.in
6.	Dr. D. Nagaraju Prof. Department of Studies in Earth Science, University of Mysore, Manasagangonthri, Mysore- 06	Off : Res : Cell : 9448600983 Email : mayanagaraju1966@gmail
7.	Dr. M.R. Janardhana Ass. Prof. & HOD, Dept. Of Geology, Yuvarajas College, University of Mysore, Mysore- 06	Off : Res : Cell : 9342116241 Email : drmrjanardhana@rediffmail
8.	Dr. M.P. Sadashiva Associate Professor, DOS In Chemistry, University Of Mysore, Manasagangotri, Mysore- 570006	Off : Res : Cell : 9986043711 Email : mpsadashiva@gmail

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From 08.12.2020 to 21.12.2020**

S.N	Name & Address of the Resource Persons	Contact No. & E-mail
9.	Dr. P. Madhusudan Senior Research Scientist, Dept. Of Materials Science, Southern University of Science and Technology, Shenzhen, P R China.	Off : Res : Cell : 97422900180 Email : madhumysu@gmail.com
10.	Dr. N.S Usha Scientist, Malmed Research Foundation Vishweshwara Nagar, Industrial Suburb, Mysore- 570008.	Off : Res : Cell : 9480445320 Email : nsu12454@gmail
11.	Dr. H.B Manjunatha Prof. And Chairman, Department of Studies Sericulture, University of Mysore, Manasagangothri, Mysore- 570006	Off : Res : Cell : 9449059147 Email : manjunathahb@gmail
12.	Dr. G.V. Venkataramana Department of Studies in Environmental Science, University of Mysore, Manasagangothri, Mysore- 06	Off : Res : Cell : 9449783475 Email : venkataraman_1970@yahoo
13.	Dr. K.S. Venkatesh Prof. Dept. of Studies in Sugar Technology, University of Mysore, Sir M.V.P.G. Centre Tubinakere, Mandya	Off : Res : Cell : 7829699909 Email : venkateshgug@gmail
14.	Dr. Prakash Narasimha K.N Prof. Department of Studies in Earth Science, University of Mysore, Manasagangothri, Mysore- 06	Off : Res : Cell : 9449082138 Email : knpnsimha@gmail
15.	Dr. Manjunatha Pattabhi Professor and Chairman, Department of Materials Science, Mangalore University, Mangalagangothri, Mangalore- 574199	Off : Res : Cell : 9448260563 Email : manjupattabi@yahoo
16.	Prof. K.N. Mohan DOS in Chemistry University of Mysore, Manasagangothri, Mysuru- 570006	Off : Res : Cell : 9449627573 Email : drknmohana@gmail










**Address List of Resource Persons of the 12th Refresher Course in Material Science (Online)
From 08.12.2020 to 21.12.2020**

S.N	Name & Address of the Resource Persons	Contact No. & E-mail
17.	Prof. H.S. Yathirajan UGC BSR Faculty Fellow, Prof. Of Chemistry, DOS in Chemistry, University of Mysore, Manasagangothri, Mysore- 570006	Off : Res : Cell : 8618041019 Email :
18.	Dr. B.V. Mohan Kumar Associate Prof. Dept. Of Physics Govt. First Grade College, Yalahanka, Bengaluru- 560064	Off : Res : Cell : 9945041856 Email :
19.	Dr. Rajesh Kumar T Associate Professor, Dept. Of Biochemistry, JSS Medical College, JSS Academy of Higher Education & Research, Mysore- 570025	Off : Res : Cell : 9972012892 Email : kumar_rt@yahoo
20.	Prof. Dinesh Rangappa Prof. & Programme Coordinator, Dept. Of Nanotechnology, Visvesvaraya Technological University, Chickballapur, Bangalore- 562101	Off : Res : Cell : 9632764659 Email : dineshrangappa@gmail

Course Coordinator










21.	Prof. B.V. Suresh Kumar Course Co-ordinator, Dept. of Studies in Earth Science, University of Mysore, Manasagangothri, Mysore- 06	Off : Res : Cell : 9480443262 Email : bvsmysore@gmail.com
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**Address List of Teacher Participants of the 12nd Refresher Course in
Materials Science (Online) From 08.12.2020 to 21.12.2020**

Sl. No.	Name & Address of the Participant	Contact No. & E-mail	Photo
1.	Mahiboob Ali K. Mulla Assistant Professor of Electronics, S.S. Government First Grade College, Nargund-582207. Gadag Dist.	Off : 8377244245 Res : Cell : 9901361644 Email : mkmulla2003@gmail.com	
2.	Dr. Sr. Jessy Mathew N. Assistant Professor of Physics, Mercy College, Palakkad-678006. Kerala.	Off : 4912541149 Res : Cell : 8547383090 Email : sisjees.phy@gmail.com	
3.	Dr. Prabhuswamy M. Assistant Professor of Physics, J.S.S. Institute of Education, Sakleshpur-573134. Hassan Dist.	Off : 8173244521 Res : Cell : 7892819995 Email : prabhumallappa@gmail.com	
4.	Anu Kuruvilla Assistant Professor of Physics, Mercy College, Palakkad-678006. Kerala.	Off : 04912541149 Res : Cell : 9495224776 Email : anumahesh11@gmail.com	
5.	Dr. Vindu Vahini M. Assistant Professor of Physics, Sri D. Devaraja Urs Government First Grade College, Hunsur-571105. Mysuru Dist.	Off : 8222252069 Res : Cell : 9632390645 Email : vinduvahini@gmail.com	
6.	Arpitha H.J. Assistant Professor of Physics, Sri Adichunchanagiri First Grade College, Channarayapatna-573116. Hassan Dist.	Off : 8176252266 Res : Cell : 9738554973 Email : appiaru@gmail.com	
7.	Vidya J.S. Assistant Professor of Chemistry, J.S.S. College of Arts, Commerce and Science, Ooty Road, Mysore-570023.	Off : 08212548236 Res : Cell : 9449408746 Email : krutharthvidya@gmail.com	
8.	Arunkumar V. Banagar Assistant Professor of Physics, Government First Grade College, Shahapur-585223. Yadagir Dist.	Off : Res : Cell : 9972082126 Email : banagararun@gmail.com	
9.	Mohd Khizar Syed Assistant Professor of Physics, Kohinoor College of Arts Science and Commerce, Khuldabad-431101. Aurangabad Dist. Maharashtra.	Off : 2437241782 Res : Cell : 7276726368 Email : prof.khizersayed@gmail.com	






**Address List of Teacher Participants of the 12nd Refresher Course in
Materials Science (Online) From 08.12.2020 to 21.12.2020**

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Sl. No.	Name & Address of the Participant	Contact No. & E-mail	Photo
10.	Dr. Manjunatha S. Assistant Professor of Physics, SSA Govt. First Grade College (Autonomous), Ballari-583101.	Off : 8392274679 Res : Cell : 9480209930 Email : smanjuvaish@gmail.com	
11.	Dr. S. Abdul Khader Assistant Professor of Physics, Govt. First Grade College, Kuvempu Nagara, Mysore-570023.	Off : Res : Cell : 9980787658 Email : khadersku@gmail.com	
12.	Dr. J.G. Manjunatha Assistant Professor of Chemistry, Field Marshal K.M. Cariappa College, Madikeri-571201. Kodagu Dist.	Off : 08272228334 Res : Cell : 9731351036 Email : manju1853@gmail.com	
13.	Dr. Gottipati Venkata Srivallinath Assistant Professor of Chemistry, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9866081909 Email : vallinath999@gmail.com	
14.	Dr. Panuganti Srinivasa Sai Lecturer in Mathematics, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9985048923 Email : p.srinivasasai@gmail.com	
15.	Dr. Anumula Subbarao Lecturer in Physics, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9885713266 Email : anumula.subbarao@gmail.com	
16.	Rajanala Venu Madhav Lecturer in Botany, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9030459963 Email : venumadhav.rajanala@gmail.com	
17.	Injeti Sada Siva Reddy Lecturer in Zoology, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9346663118 Email : issr2010@gmail.com	
18.	Dr. Pramod P. Kattimani Assistant Professor of Chemistry, J.S.S. Arts, Science and Commerce College, Gokak-591307. Belagavi Dist.	Off : 08332225141 Res : Cell : 9980151458 Email : pramodkattimani91@gmail.com	

**Address List of Teacher Participants of the 12nd Refresher Course in
Materials Science (Online) From 08.12.2020 to 21.12.2020**

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Sl. No.	Name & Address of the Participant	Contact No. & E-mail	Photo
19.	Dr. M.S. Sudhir Lecturer in Chemistry, S.S. & N. College, Narasaraopet-522601. Guntur Dist. Andhra Pradesh.	Off : 08647222011 Res : Cell : 9490645147 Email : mssudheer2001@gmail.com	
20.	Dr. Sovan Kumar Panda Assistant Professor of Electronics, Bidhan Chandra College, Rishra-712248. Hooghly Dist. West Bengal	Off : 3326726784 Res : Cell : 8001321133 Email : sovan.panda@gmail.com	
21.	Syedshasaheb S. Patil Assistant Professor of Chemistry, K.L.E.S' G.H. College, Haveri-581110.	Off : 08375232475 Res : Cell : 9964833297 Email : patilss786@gmail.com	
22.	Dr. D. Sajeev Assistant Professor of Physics, Government College, Kariavattom, Thiruvananthapuram-695581. Kerala.	Off : 04712417112 Res : Cell : 9567990994 Email : sajeevphy@gmail.com	
23.	Suvarnalatha Shenoy Assistant Professor of Physics, Sri Bhuvanendra College, Karkala-574104. Udupi Dist.	Off : 08258230234 Res : Cell : 9901631088 Email : suvarnalathashenoy@gmail.com	
24.	Dr. Neena P. Assistant Professor of Physics, S.N.M. College, Maliankara-683516. Ernakulam Dist.	Off : 4842483600 Res : Cell : 9495241542 Email : neenaaju@gmail.com	
25.	Dr. Prasenjit Mahato Assistant Professor of Chemistry, Raghunathpur College, Purulia-723133. West Bengal.	Off : 7001439480 Res : Cell : 7362929593 Email : prasen.mahato@gmail.com	

12th REFRESHER COURSE IN MATERIALS SCIENCE (ONLINE)
FROM 08.12.2020 TO 21.12.2020
SEMINAR SCHEDULE

Sl. No.	Name of the Participants	Subject	Title of the Seminar Topic	Date & Time
1.	Dr. Sr. Jessy Mathew N	Physics	Frames of Reference	18.12.2020 02.00 to 03.15
2.	Dr. Prabhuswamy M.		Electronic Waste	
3.	Anu Kuruvilla		Thin films	
4.	Dr. Vindu Vahini M.		Cosmic Rays	
5.	Arpitha H.J.		Crystallography	

1.	Vidya J.S.	Chemistry	Colloids	18.12.2020 03.45 to 05.00
2.	Dr. J.G. Manjunatha		Electro Chemicals Sensors	
3.	Dr. Gottipati Venkata Srivallinath		Determination of Zinc in trace amounts	
4.	Dr. Pramod P. Kattimani		Food Adulteration Analysis	
5.	Dr. M.S. Sudhir		Acid Base Theory	

1.	MahiboobAli Mulla	Electronics	Power Electronics	19.12.2020 10.00 to 11.15
2.	Dr. Sovan Kumar Panda		Properties of Nanomaterials.	
3.	Dr. P. Srinivasa Sai	Mathematics	Vedic Maths Techniques	
4.	Venu Madhav Rajanala	Botany	Water Treatment	
5.	Sadasivareddy Injeti	Zoology	Effect of water pollution in aquatic animals	

1.	Arunkumar V. Banagar	Physics	DC Conductivity Studies in SrO and V2O5 doped Borate Glasses	19.12.2020 11.45 to 01.00
2.	Mohd Khizar Syed		Renewable Energy Resources	
3.	Dr. Manjunatha S.		Humidity sensing application of Polyaniline/SnO2 Composite	
4.	Dr. S.Abdul Khader		Magneto electric Composites	
5.	Dr. Anumula Subbarao		Network system	

1.	Syedshasaheb. S. Patil	Chemistry	Chemistry in everyday life	19.12.2020 02.00 to 03.15
2.	Prasenjit Mahato		Functional Materials for the upconversion of photon	
3.	Dr. Sajeev D	Physics	Percolation Simulations in Material Science	
4.	Suvarnalatha Shenoy		Bipolar Junction Transistor	
5.	Dr. Neena . P		Fluid Dynamics	

UGC-HUMAN RESOURCE DEVELOPMENT CENTRE
MANASAGANGOTRI, MYSORE-570 006.

12th REFRESHER COURSE IN MATERIALS SCIENCE (ONLINE) – TIME TABLE FOR 1st WEEK (08.12.2020 TO 14.12.2020)
THRUST AREA : INDUSTRIAL MINERALS AND MATERIALS

Date and Day	10.00 AM to 11.15 AM	11.45 AM to 1.00 PM	1.00 to 2.00	2.00 PM to 3.15 PM	3.45 PM to 5.00 PM	
08.12.2020 Tuesday	Instructions to teacher-Participants	Industrial Minerals – I Prof. K.N. Prakash Narasimha	L U N C H B R E A K	Nano Composites for Solar Energy Harvesting Prof. Siddaramaiah	Industrial Pollution and Its Consequences Prof. G.V. Venkataramana	
09.12.2020 Wednesday	Space Environment and Its Applications in Basic Science – I Dr. M.S. Vijay Kumar	Space Environment and Its Applications in Basic Science – II Dr. M.S. Vijay Kumar		Industrial Minerals and Rocks – II Prof. K.N. Prakash Narasimha	Recent Trends in Visible Light Driven Photocatalytic System for Environmental Remediation Dr. P. Madhusudan	
10.12.2020 Thursday	Mechanical Behaviour of Soil as Construction Material Prof. S.K. Prasad	Super Absorbents Hydrogels Prof. Siddaramaiah		Material Preparation Under Zero Gravity – I Dr. M.S. Vijay Kumar	Material Preparation Under Zero Gravity – II Dr. M.S. Vijay Kumar	
11.12.2020 Friday	Corrosion of Metals and Alloys Prof. K.N. Mohan	Water Quality Parameters for Industrial Uses Prof. D. Nagaraju		Constructional Geomaterials Prof. M.R. Janardhan	Design and Fabrication of Carbon Based 2D Materials for Energy Conversion and Solar Hydrogen Generation Dr. P. Madhusudan	
12.12.2020 Saturday	Sustainable Alternative Minerals in Construction Practices Prof. P.K. Umesha	Environmental Laws for Industries Prof. D. Nagaraju		Industrial Omission and Its Impact on Air Quality Prof. G.V. Venkataramana	Library Work	
13.12.2020 Sunday	HOLIDAY			HOLIDAY		
14.12.2020 Monday	Recent Development on Graphene Based Anti-corosion Coating Materials Prof. K.N. Mohan	Role of Minerals (Elements) in Metabolism Dr. N.S. Usha Prakash		Preparation of Thin Films Prof. Manjunath Pattabi	Hydrothermal Technique for Tailoring Heterogenous Nanostructures for Efficient Solar Energy Conversion, Photocatalysis and Environmental Remediation Dr. P. Madhusudan	

Tea Break : 11.15 AM to 11.45 AM and 3.15 PM to 3.45 PM



**UGC-HUMAN RESOURCE DEVELOPMENT CENTRE
MANASAGANGOTRI, MYSORE-570 006.**

**12th REFRESHER COURSE IN MATERIALS SCIENCE – TIME TABLE FOR 2nd WEEK (15.12.2020 TO 21.12.2020)
THRUST AREA : INDUSTRIAL MINERALS AND MATERIALS**

Date and Day	10.00 AM to 11.15 AM	11.45 AM to 1.00 PM	1.15 to 2.00	2.00 PM to 3.15 PM	3.45 PM to 5.00 PM	
15.12.2020 Tuesday	Silk Biomaterials and Its Applications – I Prof. H.B. Manjunath	Silk Biomaterials and Its Applications – II Prof. H.B. Manjunath	L U N C H B R E A K	Organic Materials and Its Applications Prof. M.P. Sadashiva	Industrial Effluents and Control Measures Prof. G.V. Venkataramana	
16.12.2020 Wednesday	Sugar Industry – I Prof. K.S. Venkatesh	Sugar Industry – II Prof. K.S. Venkatesh		Gem Minerals – I Prof. K.N. Prakasha Narasimha	Gem Minerals – II Prof. K.N. Prakasha Narasimha	
17.12.2020 Thursday	Advance Nano Ceramic Energy and Environmental Applications Prof. Dinesh Rangappa	Vacancy Engineered Black Tio2 & Its Carbon Nano Composite with Enhanced Photocatalysis Performance Prof. Dinesh Rangappa		Application of Thin Films Prof. Manjunath Pattabi	Industrial Minerals and Materials Prof. B.V. Suresh Kumar	
18.12.2020 Friday	Crystal Structure Studies of Small Molecules – I Prof. Yathirajan	Crystal Structure Studies of Small Molecules – II Prof. Yathirajan		Participants Seminar – 1 Dr. B.V. Mohan Kumar	Participants Seminar – 2 Prof. K.N. Mohan	
19.12.2020 Saturday	Participants Seminar – 3 Prof. B.V. Suresh Kumar	Participants Seminar – 4 Dr. B.V. Mohan Kumar		Participants Seminar – 5 Dr. B.V. Mohan Kumar	Library Work	
20.12.2020 Sunday	HOLIDAY			HOLIDAY		
21.12.2020 Monday	Biomaterial for Biomedical Application Dr. Rajesh Kumar T.	Tissue Engineering or Regenerative Medicine Dr. Rajesh Kumar T.		ONLINE TEST AND FEEDBACK SESSION		

Tea Break : 11.15 AM to 11.45 AM and 3.15 PM to 3.45 PM



UNIVERSITY OF MYSORE
UGC –HUMAN RESOURCE DEVELOPMENT CENTRE, MANASAGANGOTRI, MYSORE-570 006
12th REFRESHER COURSE IN MATERIAL SCIENCE

GROUP PHOTO

