

**MHRD Scheme on Global Initiative on Academic Network (GIAN) a short course on:  
Polyoxometalates in Materials Science, Technology and Medicine**

Date: 8 – 17 May, 2017

Venue: Auditorium, Teaching and Research Complex (TRC), IISER Kolkata, Mohnapur,  
West Bengal, India 741246

Expert: Prof. Craig L. Hill, Emory University, USA.

Local Coordinator: Dr. Soumyajit Roy, IISER Kolkata.

<i>Date</i>	<i>Time</i>	<i>Topic</i>	<i>Instructor</i>
8 May	8:30-10:30	Registration of Participants	
	10:30-10:45	Inauguration	Director, IISER Kolkata
	10:45-11:00	Scope of the course	Dr. Soumyajit Roy
	11:00-12:00	Overview of Polyoxometalate Science	Prof. Craig L. Hill
	12:00-14:00	Lunch Break	
	14:00-15:00	Perspectives in Inorganic Chemistry	Prof. R. N. Mukherjee
	15:00-16:00	The chemistry and photochemistry of polyoxometalates and their hybrid materials	Dr. Graham Newton
	16:00	Tea Break	
	17:30-18:30	Discussion with Prof. Hill	Prof. Craig L. Hill
Venue: Room No. 112, Lecture Hall complex (LHC), IISER Kolkata, Mohnapur, West Bengal, India 741246			
11 May	10:30-11:30	Polyoxometalate Properties and Counter Ion Effect	Prof. Craig L. Hill
	11:30-12:30	Designing Functional Polyoxomolybdates - A Crystal Engineering Approach	Prof. A. Ramanan
	12:30-13:30	Bio inspired oxidation reactions	Dr. Sayam Sen Gupta
	13:30-14:30	Lunch Break	
	14:30-15:30	Supported heteropolyacids:synthesis, characterization and application in acid catalyzed reactions	Prof. Anjali Patel
	15:30-16:30	Functional Polyoxometalates: Aerial CO <sub>2</sub> Fixation, Chiral Separation and Electrocatalytic Generation of Oxygen and Hydrogen from Water	Prof. Samar K. Das
	16:30-17:00	Tea Break	
	17:00-18:00	On Theoretical Methods in Chemistry	Dr. Ashwani K. Tiwari

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12 May	10:30-11:30	POMs Reactivity	Prof. Craig L. Hill
	11:30-11:40	Tea Break	
	11:45-12:45	On Vanadium Polyoxometalate	Prof. Yoshihito Hayashi
	12:45-14:00	Lunch Break	
	14:00-15:00	Introduction to Crystallography	Dr. Chilla Malla Reddy
	15:00-15:30	Tea Break	
	15:30-16:30	Discussion with Prof. Hill	Prof. Craig L. Hill
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15 May	10:30-11:30	POMs in Materials science	Prof Craig L. Hill
	11:30-11:45	Tea Break	
	11:45-12:45	On Raman Spectroscopy	Dr. Goutam Dev Mukherjee
	12:45-14:00	Lunch Break	
	14:00-15:00	On Electrochemical Water Oxidation Catalysis	Dr. Abhishek Dey
	15:00-15:45	Tea Break	
	15:45-16:45	Discussion with Prof. Hill	Prof. Craig L. Hill
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16 May	9:30-10:30	POMs in Solar Fuels	Prof. Craig L. Hill
	10:30-11:00	Tea Break	
	11:00-12:00	On Nanomaterials	Dr. Venkataramanan Mahalingam
	12:00-14:00	Lunch Break	
	15:30-16:30	Discussion with Prof. Hill	Prof. Craig L. Hill
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17 May	10:00-11:00	POMs in Biology and Medicine	Prof. Craig L. Hill
	11:00-12:00	On Soft-Oxometalates	Dr. Soumyajit Roy
	12:00-14:00	Lunch Break	
	14:00-15:00	On Translational Research and How to do Start ups?	Prof. Craig L. Hill

	15:00-15:15	Tea Break	
	15:15-16:15	Discussion with Prof. Hill	Prof. Craig L. Hill