# Dr. Arindam Giri

Senior Manager R&D

Black Rose Chemical Divison, Black Rose Industries Ltd. Contact No - 09830945596, 08777421805

E-mail: arindam.giri1@gmail.com, bilupolymer@rediffmail.com

**Career Objectives:** I intend to build my career in the competitive environment of a growing organization, where I would be able to utilize my knowledge and skills effectively and add significant value to the organization and would be appreciated and rewarded for putting forward my efforts.

## Work Experience:

Position	From	То	Duration	Organization
Senior Manager R&D	27/11/18	Till date	3 years & 2	Black Rose Industries
			months	Ltd.
D.S. Kothari Post-	01/03/16	20.11.2018	2 yrs & 8	Jadavpur University
<b>Doctoral Fellow</b>			months	
Research Associate	01/09/15	29/02/16	5 months	University of Calcutta
Research Scholar	01/09/09	31/08/2015	5yrs 5monts	University of Calcutta

### **Industrial Exposure:**

- > Successfully developed commercial grade N-Methylol Acrylamide.
- > Successfully developed commercial water soluble adhesive for ceramic industry.
- > In-hand experience of industrial scale up.
- > In-hand experience on industrial grade polymer synthesis.
- In-hand experience on synthesis and process development of N- Methylol Acrylamide used for textile industry.



- Working on synthesis of industrial grade synthetic flocculant for waste-water treatment.
- Working on PAM (poly acryl-amide) based speciality chemicals for paper, textile and oil industry.

#### **Research Exposure :**

- In-hand experience on synthesis of polyacrylamide based synthetic resin by solution polymerization, emulsion polymerization and radiation induced polymerization techniques.
- In-hand experience on development and synthesis of polymer nanocmposite and their application.
- Experience on polymerization of other synthetic olefins like- acryl amide, acrylic acid, diethylene glycol dimethacrylate, 2-hydroxyethyl methacrylate, lactic acid and so on.
- Working experience on synthesis and characterization of biopolymer based different graft copolymers and their applications in various fields like flocculation, drug delivery, electrochemical device, sensors etc.
- In-hand working experience on synthesis of conducting polymers and their potential applications.

**Instrumental Exposure :** Gel permeation Chromatography (GPC), High Performance Liquid Chromatography (HPLC), High Resolution Mass Spectrometry (HRMS), Fourier-Transform Infrared Spectroscopy (FTIR), Nuclear Magnetic Resonace Spectroscopy (NMR), Differential Scanning Calorimetry (DSC), Thermo Gravimetric Analysis (TGA), Gel Viscometer, Rheometer, Ultrasonicator, Hydraulic Press, pH meter and Franz diffusion cell.

**Computer proficiency:** MS Word, MS Office, Power Point, Excel, Origin, Chem Bio-Draw, Skill creast.

#### **Professional Qualification:**

**Ph.D.** (Tech.) in Polymer Science and Technology from University of Calcutta, 31<sup>st</sup> August 2015

Thesis Entitled "Synthesis, Characterization And *In-vitro* Sustained Drug Release Behavior Studies On Natural Gum Based Organic-Inorganic Hybrid Nanocomposite Hydrogels".

### M. Sc. Projects:

M.Sc. summer project at **BIT** (Mesra) on Development of a new generation of biopolymer based on **Polyacrylamide grafted Carboxymethyl Tamarind (CMT-g-PAM)** from 1st June to 14 July 2007.

### **Research Publications:**

- Arindam Giri, Rahul Bhowmick, Chandraday Podhan, Dipanwita Majumder, Swapan Kumar Bhattacharya and Mahammad Ali. Synthesis and characterization of biopolymer based hybrid hydrogel nanocomposite and study of their electrochemical efficacy, *International Journal of Biological Macromolecules*, 123 (2019) 228-238. (I.F.-5.162)
- Rahul Bhowmick, Abu Saleh Musha Islam, Arindam Giri, Atul Katarkar and Mahammad Ali. Rhodamine based Turn-On Chemosensor for Fe3+ in Aqueous Medium and Interactions of its Fe3+ Complex with HSA, *New Journal of Chemistry*, 41 (2017) 11661-11671. (I.F.-3.288)
- Arindam Giri, Tridib Bhunia, Abhijit Pal, Luna Goswami, Abhijit Bandyopadhyay.In-situ synthesis of polyacrylate grafted carboxymethyl guargum–carbon nanotube membranes for potential application in controlled drug delivery, *European Polymer Journal*, 74 (2016) 13–25. (I.F.-3.862)
- Abhijit Pal, Arindam Giri, Abhijit Bandyopadhyay. Influence of hydrodynamic size and zeta potential of a novel polyelectrolyte poly (acrylic acid) grafted guar gum for adsorption of Pb (II) from acidic waste water, *Journal of Environmental Chemical Engineering*, 4 (2016) 1731–1742. (I.F.-4.30)
- 5. Arindam Giri, Tridib Bhunia, Luna Goswami, Asit B. Panda, Abhijit Bandyopadhyay.Fabrication of acrylic acid grafted guar gum-multiwalled carbon nanotube hydrophobic membranes for transdermal drug delivery, *RSC Advances*, 5 (2015) 41736-41744. (I.F.-3.119)
- 6. Arindam Giri, Tridib Bhunia, Samir R. Mishra, Luna Goswami, Asit B. Panda, Abhijit Bandyopadhyay. A transdermal device from 2-hydroxyethyl methacrylate grafted

carboxymethyl guar gum-multi-walled carbon nanotube composites, *RSC Advances*, 4 (2014)13546-13556. (**I.F.-3.119**)

- Tanbir Nasim, Abhijit Pal, Arindam Giri, Luna Goswami, Abhijit Bandyopadhyay. Exploring polyelectrolytic features of the exudate from native Acacia nilotica for flocculating aqueous kaolin suspension, *Separation and Purification Technology*, 131 (2014) 50-59. (I.F.- 5.774)
- Abhijit Pal, Tanbir Nasim, Arindam Giri, Abhijit Bandyopadhyay. Polyelectrolytic aqueous guar gum for adsorptive separation of soluble Pb (II) from contaminated water, *Carbohydrate Polymers*, 110 (2014) 224-230. (I.F.-7.182)
- A research highlight"Gum to remove toxic metal from water" publishedin <u>Nature India</u>, Doi10.1038/ninindia.2014.83; Published online 23<sup>th</sup> June 2014.
- 10. Arindam Giri, Tridib Bhunia, Samir Mishra, Luna Goswami, Asit B. Panda, Sagar Pal, Abhijit Bandyopadhyay. Acrylic acid grafted guargum–nanosilica membranes for transdermal diclofenac delivery, *Carbohydrate Polymers*, 91 (2013) 492-501.(I.F.-7.182)
- 11. A research highlight"Delivering pain killer through skin" published in <u>Nature India</u>, Doi10.1038/ninindia.2012.160; Published online 29<sup>th</sup> October 2012.
- 12. Tridib Bhunia, Arindam Giri, Tanbir Nasim, Dipankar Chattopadhyay, Abhijit Bandyopadhyay. A transdermal diltiazem hydrochloride delivery device using multi-walled carbon nanotube/poly (vinyl alcohol) composites, *Carbon*, 52 (2013) 305-315. (I.F.-8.821)
- Tridib Bhunia, Arindam Giri, Tanbir Nasim, Dipankar Chattopadhyay, Abhijit Bandyopadhyay. Uniquely different PVA-xanthan gum irradiated membranes as transdermal diltiazem delivery device, *Carbohydrate Polymers*, 95 (2013) 252-261. (I.F.-7.182).
- 14. Tridib Bhunia, Arindam Giri, Tanbir Nasim, Dipankar Chattopadhyay, Abhijit Bandyopadhyay. Physical, mechanical, and transdermal diltiazem release analysis of nanosilica tailored various poly (vinyl alcohol) membranes, *Journal of Applied Polymer Science*, 130 (2013) 2076-2086. (I.F.-2.188)
- 15. Arindam Giri, Totan Ghosh, Asit Baran Panda, Sagar Pal, Abhijit Bandyopdhyay. Tailoring carboxymethyl guargum hydrogel with nanosilica for sustained transdermal release of diclofenac sodium, *Carbohydrate Polymers*, 87 (2012) 1532–1538. (I.F.-7.182)
- **16. Arindam Giri**, Manas Bhowmick, Sagar Pal, Abhijit Bandyopadhyay. Polymer hydrogel from carboxymethyl guar gum and carbon nanotube for sustained trans-dermal release of

diclofenac sodium, *International Journal of Biological Macromolecules*, 49 (2011) 885–893. (I.F.-5.162)

 17. Sagar Pal, Mrinal Kanti Gorain, Arindam Giri, Abhijit Bandyopadhyay, Asit Baran Panda. In-situ silica incorporated carboxymethyl tamarind: Development and application of a novel hybrid nanocomposite, *International Journal of Biological Macromolecules*, 49 (2011)1152–1159. (I.F-5.162)

## **Conference Attended:**

Name of the Conference	Activity	During Date	Place	
National Conference on <b>Polymer &amp;</b>	Poster	12 <sup>th</sup> & 13 <sup>th</sup>	Kolkata, India	
Rubber Technology for 21 <sup>st</sup>	presentation	October, 2012		
Century (PRC-12)	-			
International Conference on	Oral	$10^{\text{th}}$ to $12^{\text{th}}$	Ahemdabad,	
Advancements in Polymeric	presentation	February, 2012	Gujrat, India.	
Materials (APM-2012)				
International Conference on	Poster	26 <sup>th</sup> & 27 <sup>th</sup>	Cochin, Kerala,	
Advances in Polymer Technology	presentation	February, 2010	India	
(APT-10)				
International Conference and Expo	Participant	22 <sup>nd</sup> to 24th	CRNN, University	
on Recent Advances in Polymer &		January 2014	of Calcutta,	
Rubber Science & Technology			Kolkata.	
(RAPT 2014)				
International Rubber Conferences	Participant	$17^{\text{th}}$ to $19^{\text{th}}$	Powai,Mumbai,	
and Exhibition (IRC-2010)		November,	India.	
		2010,		
National Conferences On Advances	Participant	24 <sup>th</sup> to 26 <sup>th</sup> June,	Haldia,West	
In Materials & Technology		2011	Bengal, India	
(NCRAMT-2011)				
Symposium On Polymer Science	Participant	10 <sup>th</sup> December,	IISER-Kolkata	
(SPS-2011)		2011	,West Bengal	

# Academic Qualification:

Degree	Qualification	Board/University	Year	Division
10 <sup>th</sup>	Madhyamik	W.B.B.S.E	1999	1 <sup>st</sup>
12 <sup>th</sup>	H.S.	W.B.C.H.S.E	2001	1 <sup>st</sup>
Graduation	B.Sc (Hon's)	Vidyasagar University	2005	2 <sup>nd</sup>
Post Graduation	M.Sc.	Guru Ghasidas University	2008	1 <sup>st</sup>

### **Personal Skills:**

- Positive Attitude towards work.
- Good problem solving.
- Quick learner and Hardworking.

### **Personal Details:**

Date of Birth	: 26.05.1984
Gender	: Male
Marital status	: Married
Language Known	: Bengali, English, Hindi
Permanent Address	: Vill- Benadiha, P.O Saluka, P.S Narayangarh, Dist Paschim Medinipur West Bengal, India, PIN- 721437

#### Present & corresponding Address:

A-602, Shree Shagun CHS, Sector-10, Plot-268, Kharghar, Navi Mumbai, Maharastra - 410210

### **References:**

Prof. Abhijit Bandyopadhyay (Professor) Thesis Supervisor	<b>Prof. Sagar Pal</b> (Professor)	<b>Prof. Mahammad Ali</b> (Vice- Chancellor) Aliah University
Dept. of Polymer Sci. &Tech. University of Calcutta 92- A.P.C. Road Kolkata- 700009	Department of Chemistry IIT (ISM), Dhanbad Jharkhand - 826004, India	New Town Campus II/27, New Town, Kolkata-700160 West Bengal, India
abhijitbandyopadhyay@ yahoo.co.in	sagarpal@iitism.ac.in	m_ali2062@yahoo.com
PH:09433186957	PH: 09471191529	PH: 08335033902

## **Declaration:**

I hereby declare that all the information stated by me, are authentic to the best of my knowledge and believe.

Date 12.02.22

Place: Navi Mumbai

Anindam Gini

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