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Senior Research Fellow (SRF),  
 Polymer Research Center (PRC),  
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**RG Score: 15.79; h index: 3; Citation: 30**

**ACADEMICS**

<b>2015-20</b>	Pursuing Doctoral Degree at <b>IISER Kolkata</b> , India
<b>2014</b>	M.Sc., <b>Gauhati University</b> , India (8.37 CGPA)
<b>2012</b>	B.Sc., <b>B. Borooah College, Gauhati University</b> , India (84.6 %)
<b>2009</b>	HS (X+II), <b>B. Borooah College</b> , Guwahati, India (71.4 %)
<b>2007</b>	HSLC(X), <b>Modern English School</b> , Guwahati, India (80.0 %)

**AWARDS & FELLOWSHIP**

<b>2019</b>	Best Performing Student of the Year ( <b>DCS IISER KOLKATA</b> ) 2018
<b>2018</b>	Swachh Bharat award (3 <sup>rd</sup> Prize)- <b>MHRD, Govt. of India</b>
<b>2018</b>	Senior Research Fellow (SRF)
<b>2015</b>	Junior Research Fellow (JRF)
<b>2014</b>	SLET/SET for Lectureship (Rank 7).
<b>2014</b>	NET- LS (Rank 45) organized jointly by CSIR-UGC.
<b>2013</b>	Summer Research Fellowship, 2012-2013, awarded by INSA, India.
<b>2012</b>	National UGC Fellowship for Post Graduation, 2012-2014.
<b>2012</b>	Co-Editor of Departmental half yearly magazine " <b>The Chemical Axis</b> "
<b>2012</b>	1st class 1st with Distinction in Graduation.
<b>2007</b>	Anandaram Barooah Award

**PUBLICATIONS**

<b>2020</b>	
<b>11</b>	<b>R. Kumar</b> , S. Mukherjee, Narayanan Lakshminarasimhan R. Shunmugam. "Unique magnetizable Polymer Gel via Photon Triggered Thiolation."
<b>10</b>	S. S. Prasath, J. Brijitta, <b>R. Kumar</b> , J. John, P. Holmqvist, R. Shunmugam, Chemically crosslinked poly(N-isopropylacrylamide-block-4-vinylpyridine)organogel with myriad applications." <b>Materials Letters</b> , 2020.
<b>9</b>	<b>R. Kumar</b> , R. Shunmugam. "An overview on recent advances to waste water management using polymer magnetic." <b>The Chemical Axis</b> ." 2020.
<b>8</b>	<b>R. Kumar</b> , A. Rajpoot, A. Roy, R. Shunmugam. "Engineering Biodegradable Polymeric Network for the Efficient Removal of Organo-amphiphilic Toxicants." <b>Polym. Adv. Technol</b> , 2020.

<b>2019</b>	
7	Dial-In” Emission from Unique Flexible Material with Polarization Tuneable Spectral Intensity. <b>Chem. Eur. J.</b> 2019, 25, 13514 – 13522. (Accepted for <b>frontispiece</b> )
6	<b>R. Kumar</b> , R. Shunmugam. “Light Triggering Photocatalysis to Water Detoxification.” <b>The Chemical Axis</b> 2019, 18 (2), 25-27.
<b>2018</b>	
5	<b>R. Kumar</b> , R. Shunmugam. “Toxicity Monitorable Polymeric Materials for Chronic Elements in Aqueous Environment.” <b>The Chemical Axis</b> (ISSN 2249 8842) 2018, 17(2), 35-37.
4	<b>R. Kumar</b> , R. Shunmugam. “Uprise in Photochemistry towards Global Application.” <b>The Chemical Axis</b> (ISSN 2249 8842) 2018, 17(1), 70-73
<b>2017</b>	
3	<b>R. Kumar</b> , R. Shunmugam. “Unique Design of Porous Organic Framework Showing Efficiency Towards Removal of Toxicants.” <b>ACS Omega</b> , 2017, 2, 4100-4107.
2	M. Mukherjee, S. Mukherjee, <b>R. Kumar</b> , R. Shunmugam. “Improved thermal and mechanical properties of polynorbornene upon covalent attachment with graphene sheets.” <b>Polymer</b> , 2017, 123, 321-333.
<b>2014</b>	
1	D. Basak, <b>R. Kumar</b> and S. Ghosh. “Telechelic Poly(disulfide)s and Related Block Copolymers.” <b>Macromol. Rapid Commun.</b> 2014, 35, 1340-1344. (appeared as <b>Back Cover</b> )

## RESEARCH

<b>ACADEMIC:</b>	
<b>07/15</b> (In progress)	PhD, Polymer Research Center, <b>IISER Kolkata</b> , India <b>Prof. Raja Shunmugam</b> Project: “Unique Design to make a Variety of Hydro- as well as Organic Gels and their Applications in Materials”
<b>06-07/18</b>	Swachh Bharat Summer Internship <b>2018</b> Nodal Officer: <b>Sushmita Bhattacharjee</b> , IISER KOLKATA, India Topic for Internship: “sanitation/ hygiene”
<b>01-06/15</b>	Project Assistant, Polymer Science Unit, <b>IACS</b> , Kolkata, India <b>Prof. Suhrith Ghosh</b> Project: “Synthesis of NDI based unsymmetrical Bola-amphiphile.”
<b>10/13-12/14</b>	M.Sc. Project, <b>Gauhati University</b> , Guwahati, India <b>Prof. Rupam J. Sarma</b> Project: “Effect of $\beta$ -Cyclodextrin ( $\beta$ -CD) Complexation on the Fluorescence Emission Characteristics of Water-Soluble Naphthalimide Derivatives.”
<b>06-08/13</b>	Summer Research Fellow, Polymer Science Unit, <b>IACS</b> , Kolkata, India <b>Prof. Suhrith Ghosh</b> Project: “Synthesis and characterization of telechelic polymers.”
<b>05-07/12</b>	Summer Research Internship, <b>IIT Guwahati</b> , India <b>Prof. Parameswar K. Iyer</b>

	Project: “Synthesis of Perylene based semiconducting material.”
04/12 (mm/yy)	Summer Research Internship, <b>B. Borooah College</b> , Guwahati, India <b>Prof. Bijoy S. Goswami</b> Project: “Arsenic analysis for ground water in different districts of Assam.”

## PRESENTATIONS

<b>ORAL</b>	
2019	1. Science for Sustainable Development ( <b>SSD 2019</b> ), Dept. of Chemistry, <b>B. Borooah College</b> in association with <b>ASTEC DST, Govt. of Assam.</b> <u>Presented topic</u> - “Environmental Remediation Using Engineered Photopolymer Resins”
2018	2. Department of Chemistry, <b>Gauhati University</b> , Guwahati – <b>2018</b> <u>Presented topic</u> - “Polymer Empowerment in Present Society.” 3. Department of Chemistry, <b>B. Borooah College</b> , Guwahati – <b>2018</b> <u>Presented topic</u> - “Water and Its Treatment.”
<b>POSTER</b>	
2019	1. <b>Chemical Science Young Investigator Symposium-2019.</b> <u>Presented Paper:</u> Unique 3D Polymer for Water Remediation from Industrial Wastes (IISER KOLKATA)
2018	2. <b>MACRO 2018 (IISER PUNE)</b> <u>Presented Paper:</u> Polymer Based Network: An Ideal System for the Flexible Organic Light Emitting Diode (OLED). 3. Soft Matter and Chemical Physics in Kolkata region - <b>2018 (SMCPK – 2018)</b> <u>Presented paper:</u> Polymer: An Ideal Model System to demonstrate Organic Light Emitting Diode (OLED) properties.
2017	4. Scientific India-Russia Conference <b>2017 (IISER KOLKATA)</b> <u>Presented paper:</u> Engineering Biodegradable Polymeric Network as Efficient Trapper for Toxicants. 5. Smart Materials : Methods and Applications ( <b>SMMA 2017</b> , IISER KOLKATA) <u>Presented paper:</u> Photochemistry derived Polymeric Network for Environmental Remediation. 6. <b>CRSI-RSC Symposium 2017</b> (IIT Guwahati, Gauhati University, Tezpur University) <u>Presented Paper:</u> Multifunctionalized Microporous polymeric Network: An Efficient Tool for Removal of Toxicants. 7. Chemistry Interfacing with Biology and Physics ( <b>CIBP 2017</b> , IISER KOLKATA) <u>Presented Paper:</u> Multifunctionalized Microporous polymeric Network: An Efficient Tool for Removal of Toxicants. 8. <b>MACRO 2017 (NEIST Trivandrum)</b> <u>Presented Paper:</u> A New class of Polymeric Network as Efficient Water Toxicant Remover.

2016	9. <b>ICFM 2016</b> (IIT Kharagpur) <u>Presented Paper:</u> Biodegradable Porous Organic Network via Poly(olefin) Cross linking: An Efficient Dye Adsorption Material.
<b>PARTICIPANT/VOLUNTEER</b>	
2010-2019	1. Symposium on Polymer Science (SPS) 2019, IISER KOLKATA) 2. Asian Meeting on Metal Oxide Assemblies 2017 (AMMOA 2017, IISER KOLKATA) 3. MACRO 2015 (IACS, IISER KOLKATA) 4. Crystallography 2014 (Gauhati University, SAIF) 5. Science Festival 2011 (National Science Museum, B. Borooah College) 6. Youth Conclave Festival 2010 (B. Borooah College)

**SKILLS**

1. <b>Languages:</b> English / Hindi.
2. <b>Software:</b> MS Office / Chemdraw / Origin8 / Mest Rec, etc.
3. <b>Instrumentation:</b> pH-meter / Conductometer/ UV-Vis spectrophotometer / Fluorimeter (PL) / IR spectrophotometer / Gas chromatography (GC) / Cyclic Voltammeter (CV)/ Gel Permeable Chromatography (waters GPC) / Advanced Permeable Chromatography (waters APC) / Cryo-Temography (Cryo TEM, JEOL)/ Cryo Microtomy, NMR Spectrometer (JEOL 400 MHz) / Universal Testing Machine.

**REFERENCE**

<b>PhD SUPERVISOR</b>	
1.	<b>Prof. Raja Shunmugam</b> , Professor, National Ramanujan Fellow, Polymer Research Center (PRC) & Centre for Advanced Functional Material (CAFM), IISER KOLKATA, India
<b>PROJECT/COLLABORATOR</b>	
2.	<b>Prof. P. K. Iyer</b> , Professor, Dept. of Chemistry, Indian Institute of Technology Guwahati (IITG), India
3.	<b>Prof. Suhrit Ghosh</b> , Professor, Chairman, School of Applied and Interdisciplinary Sciences Indian Association for the Cultivation of Science (IACS), Jadavpur.
<b>ACADEMIC</b>	
4.	<b>Prof. Priyadarshi De</b> , Professor, Polymer Research Center (PRC) & Centre for Advanced Functional Material (CAFM), IISER KOLKATA, India.
5.	<b>Prof. Rupam J. Sarma</b> , Associate Professor, Department of Chemistry, Gauhati University, Guwahati, India.
6.	<b>Prof. Diganta Choudhury</b> , Assistant Professor, Dept. of Chemistry, B. Borooah College, Guwahati, India.