



**JADAVPUR UNIVERSITY**  
**KOLKATA - 700032**

GO No.1343-Edn(U)/1U-41/11(Pt) dt.07.12.2017  
EC Res. No. 18 Dated 12.11.2022

**APPLICATION FORM FOR PROMOTION OF UNIVERSITY TEACHERS UNDER CAREER ADVANCEMENT SCHEME**

**From : Stage/ Designation :** Assistant Prof. (Stage 2)

**To : Stage/ Designation :** Assistant Prof. (Stage 3)

**(Assistant Professor Stage 1 to Stage 2, Stage 2 to Stage 3), Assistant Professor (Stage 3) to Associate Professor (Stage 4), Associate Professor (Stage 4) to Professor/equivalent cadres (Stage 5).**

**PART A : GENERAL INFORMATION AND ACADEMIC BACKGROUND**

1. Employee Id	130032
2. Full Name	SHYAMAL ROY
3. Father's Name / Mother's Name	LATE SUNIL CH. ROY
4. Date of Birth	10-01-1978
5. Category	SC <a href="#">Doc Link</a>
6. Differently Abled	No
7. Department / School	CHEMICAL ENGINEERING
8. Current Designation	Assistant Professor
9. Academic Grade Pay (AGP) / Level	7000/11
10. Highest Qualification	Ph.D
11. Date of last promotion , if any	30-10-2017 <a href="#">Doc Link</a>
12. Date of eligibility for promotion	30-10-2022
13. Assessment Period (in years)	5
14. Address for correspondence	Dr. Shyamal Roy, Assistant Professor, Chemical Engg. Department, Jadavpur University, Kolkata-700032
15. Permanent Address	Dr. Shyamal Roy, C/O-Late Shri Sunil Ch. Roy, Vill.- Jeoldanga, P.O.- Jessore, P.S.- Habra, Dist.-24 Pgs (N), Pin-743233, Wb
16. Mobile No.	9830828569
17. E-mail Id	shyamal.roy@jadavpuruniversity.in



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**Part B. Academic Qualifications :**

**A. Last Academic Qualifications (From graduation onwards excluding research degree(s)):**

Degree/ Diploma	Name of the Board/ University	Year of Passing	(%)of Marks Obtained	Division/ Class/Grade	Subject(s)	Doc Link
BE	JADAVPUR UNIVERSITY	2005	68.12%	First	Chemical Engineering	<a href="#">View</a>
ME	JADAVPUR UNIVERSITY	2007	67.12%	First	Chemical Engineering	<a href="#">View</a>

**B. Research Degrees:**

Degree	Title of Dissertation/Thesis	Date of Award	Name of the University	Doc Link
PH.D	Catalytic Wet Air Oxidation Of Oxalic Acid Over Ceria Promoted Pt/Al <sub>2</sub> O <sub>3</sub> Catalyst	28-10-2012	INDIAN INSTITUTE OF TECHNOLOGY DELHI	<a href="#">View</a>



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**Part C. Professional Experience :**

**A.Position(s) held Prior to Joining this University, if any:**

Designation	Name of Employer	Date of Joining	Date of Leaving	Gross Salary	Reason for Leaving	Doc Link
Postdoctoral Fellow	Energy, Environmental & Chemical Engg. Dept., Washington University in St. Louis, MO, USA	26-03-2013	25-04-2013	2500000	Left due to the serious illness of father (severe heart attack).	<a href="#">View</a>
Assistant Professor	Chemical Technology Dept., SLIET, Sangrur, Punjab (A Deemed University, Govt. of India)	23-07-2012	20-02-2013	420000	Left to join in postdoctoral research at Washington University.	<a href="#">View</a>
Postdoctoral Fellow	Corporate Research & Development Centre, Bharat Petroleum Corporation Ltd. (Maharatna PSU, Govt. of India), Greater Noida, UP	04-07-2011	03-07-2012	477000	Postdoctoral tenure was 1 year and to join at SLIET, Punjab.	<a href="#">View</a>
Assistant Professor	Chemical Engg. Dept., Calcutta Institute of Technology, WBUT, West Bengal	02-06-2013	29-10-2013	408000	Left to join at Jadavpur University.	<a href="#">View</a>

**B.Posts held after Appointment at the University :**

Designation	Department/School	From date	To date	Pay Scale	AGP/Level	Doc Link
Assistant Professor - Stage 1	CHEMICAL ENGINEERING	30-10-2013	29-10-2017	15600-39100	6000/10	<a href="#">View</a>
Assistant Professor - Stage 2	CHEMICAL ENGINEERING	30-10-2017	30-10-2022	15600-39100	7000/11	<a href="#">View</a>



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**Part D. Teaching Experience :**

**A.Period of Teaching and / or Research Experience :**

Level of Classes	No. of Years
PG Classes	10
UG Classes	10
Post-doctoral Research	1
Doctoral Research	4

**B.Field(s) of Specialisation under the Subject/Discipline :**

CHEMICAL ENGINEERING, CATALYSIS, ENVIRONMENT, ENERGY.



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**Part E. Orientation / Induction Program(s) or Refresher / Short-term Course(s):**

**Program(s) / Course(s) Attended :**

Title of the Course	Place	Duration (No. of Weeks)	Period : From Date- To Date	Doc Link
UGC SPONSORED FACULTY INDUCTION PROGRAMME (GURU DAKSHTA)/ ORIENTATION PROGRAMME	JADAVPUR UNIVERSITY	4	21ST DECEMBER 2020 TO 28TH JANUARY, 2021	<a href="#">View</a>
MANAGEMENT FOR A BETTER SOCIETAL ENVIRONMENTAL-A SOCIO TECHNICAL APPROACH	JADAVPUR UNIVERSITY	3	3RD JULY-24TH JULY, 2015	<a href="#">View</a>
UGC SPONSORED REFRESHER COURSE ON 'INTERDISCIPLINARY RESEARCH USING NANOSCIENCE AND NANOTECHNOLOGY'	JADAVPUR UNIVERSITY	3	9TH MARCH-28TH MARCH, 2015.	<a href="#">View</a>



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**API SCORE CALCULATION MATRIX**

**API CATEGORY : I. TEACHING, LEARNING AND EVALUATION RELATED ACTIVITIES**

Sl.No.	Nature of Activity	Max Marks	Hours spent per academic year	Self Appraisal Score	Verified API Score	Doc.Link
1.	Direct Teaching (self declaration)	70	640	70.00	70.00	<a href="#">View</a>
2.	Examination duties (question paper setting, Invigilation, evaluation of answer scripts etc.) (self declaration)	20	200	20.00	20.00	<a href="#">View</a>
3.	Innovative Teaching-learning methodologies, updating of subject contents/courses, mentoring etc. (self declaration)	10	100	10.00	10.00	<a href="#">View</a>
<b>Total</b>				<b>100.00</b>		



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**API SCORE CALCULATION MATRIX**

**CATEGORY II: PROFESSIONAL DEVELOPMENT, CO-CURRICULAR AND EXTENSION ACTIVITIES**

Nature of Activity	Max Marks	Hours spent per academic year	Self Appraisal Score	Verified API Score	Doc.Link
a). Student related co-curricular, extension and field based activities. (i) Discipline related co-curricular activities (e.g. remedial classes, career counseling, study visit, student seminar and other events.) (ii) Other co-curricular activities (Cultural, Sports, NSS, NCC etc.). Extension and dissemination activities (public /popular lectures/talks/seminars etc.)	15	150	15.00	15.00	<a href="#">View</a>
b). Contribution to corporate life and management of the department and institution through participation in academic and administrative committees and responsibilities. i). Administrative responsibility (including as Dean / Principal / Chairperson / Convener / Teacher-in-charge/ similar other duties that require regular office hrs for its discharge) ii). Participation in Board of Studies, Academic and Administrative Committees (Self declaration)	15	150	15.00	15.00	<a href="#">View</a>
c.) Professional Development activities (such as participation in seminars, conferences, short term training courses, industrial experience, talks, lectures in refreshers/faculty development courses, dissemination and general articles and any other contribution	15	150	15.00	15.00	<a href="#">View</a>
<b>Total</b>			<b>45.00</b>		

## API SCORE CALCULATION MATRIX

### CATEGORY III: Research and Academic Contribution

#### III-A : Journal Publication

Sl. No.	Yr.of Publ.	Title of the Paper	No.of authors	Role of Applicant	No.of other co - authors	Journal Name	Volume (Issue), pg no. from - to	Journal Type	Impact Factor (I.F)	I.F Doc link	Jrnl. Pub. Link	Self Appraisal Score	Verified API Score
1	2023	La-doped LiMnPO <sub>4</sub> /C cathode material for Lithium-ion battery	2	Corresponding author / supervisor / mentor	0	Chemical Engineering Science	272, 118600	UGC Care List	4.889	<a href="#">View</a>	<a href="#">View</a>	32.50	32.50
2	2022	Kinetics study of catalytic wet oxidation of phenol over novel ceria promoted mesoporous silica supported Ru-Fe <sub>3</sub> O <sub>4</sub> catalyst	2	First and Corresponding author	0	Chemical Engineering Research and Design	182, 120-132	UGC Care List	4.119	<a href="#">View</a>	<a href="#">View</a>	35.50	35.50
3	2022	Parametric Optimization and Kinetics Study of Effective Removal of Methylene Blue by Citric Acid Modified Arjun Bark Powder	2	First and Corresponding author	0	Biomass Conversion and Biorefinery	DOI: 10.1007/s13399-022-02590-2	UGC Care List	4.050	<a href="#">View</a>	<a href="#">View</a>	35.50	35.50
4	2022	Ionic Liquid–Based Pretreatment of Lignocellulosic Biomass for Bioconversion: a Critical Review	2	First and Corresponding author	0	BioEnergy Research	DOI:10.1007/s12155-022-10425-1	UGC Care List	3.852	<a href="#">View</a>	<a href="#">View</a>	35.50	35.50
5	2022	Enhancement of Li <sup>+</sup> ion kinetics in boehmite nanofiber coated polypropylene separator in LiFePO <sub>4</sub> cells	4	Corresponding author / supervisor / mentor	0	Journal of Solid State Chemistry	312, 123214	UGC Care List	3.656	<a href="#">View</a>	<a href="#">View</a>	30.25	30.25
6	2022	Selective CO <sub>2</sub> reduction to methane catalyzed by mesoporous Ru-Fe <sub>3</sub> O <sub>4</sub> /CeO <sub>x</sub> -SiO <sub>2</sub> in a fixed bed flow reactor	9	First and Corresponding author	0	Molecular Catalysis	528, 112486	UGC Care List	5.089	<a href="#">View</a>	<a href="#">View</a>	39.00	39.00
7	2021	Transformation of Wurtzite ZnO to a New Triclinic Nanoporous ZnO Phase via Hydrothermal Treatment with Metformin for Designing Proton Conducting Material	6	Other co-author	4	Chemistry - An Asian Journal	16, 2261-2266	UGC Care List	4.839	<a href="#">View</a>	<a href="#">View</a>	26.13	26.13



Sl. No.	Yr.of Publ.	Title of the Paper	No.of authors	Role of Applicant	No.of other co - authors	Journal Name	Volume (Issue), pg no. from - to	Journal Type	Impact Factor (I.F)	I.F Doc link	Jrnl. Pub. Link	Self Appraisal Score	Verified API Score
8	2020	Ammonia-salt solvent promotes cellulosic biomass deconstruction under ambient pretreatment conditions to enable rapid soluble sugar production at ultra-low enzyme loadings	11	Other co-author	9	Green Chemistry	22, 204-218	UGC Care List	11.034	<a href="#">View</a>	<a href="#">View</a>	25.83	25.83
9	2018	Kinetic Study of Biogas Recovery from Thermo-chemically Pre-treated Rice Husk	3	Corresponding author / supervisor / mentor	0	Indian Chemical Engineer	3, 297-313	UGC Care List	1.091	<a href="#">View</a>	<a href="#">View</a>	28.50	28.50
											<b>Total</b>	<b>288.71</b>	

### III-B(i): Publications other than journal articles

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Sl. No.	Yr.of Publ.	Type of Publication	Title of the Chapter	Title of the Book	No.of authors	Name of Publisher	Status of Publisher	ISBN/ISSN No	Doc. Link	Self Appraisal Score	Verified API Score
1	2021	Reference Book	N/A	Pretreatment Methods of Lignocellulosic Biomass for Biofuel Production	1	CRC Press(Taylor & Francis)	International	9781032066929	<a href="#">View</a>	30.00	30.00
2	2019	Reference Book	N/A	Study on Metal Catalysts for Liquid Phase Hydrogenation of Aromatic Compounds in Diesel Fuel	1	NOVA Science Publishers	International	978153616713-9	<a href="#">View</a>	30.00	30.00
3	2019	Reference Book	N/A	Bioeconomic and Policy Aspects of Future Sustainable Biofuel Production	1	NOVA Science Publishers	International	9781536161366	<a href="#">View</a>	30.00	30.00
4	2019	Reference Book	N/A	Cellulose Dissolution with Ionic Liquids for Biofuel Production	1	LAP Lambert Academic Publishing	International	9786200102454	<a href="#">View</a>	30.00	30.00

Sl. No.	Yr.of Publ.	Type of Publication	Title of the Chapter	Title of the Book	No.of authors	Name of Publisher	Status of Publisher	ISBN/ISSN No	Doc. Link	Self Appraisal Score	Verified API Score
5	2019	Reference Book	N/A	Green Diesel Production from Catalytic Hydrogenation of Brown Grease	1	LAP Lambert Academic Publishing	International	9786200307644	<a href="#">View</a>	30.00	30.00
									Total	150.00	

### III-B(ii): Referring of Journal Papers from UGC list

Sl. No.	Journal Name	Title of the paper	Year of review submission	Review Invitation Letter link	Review submission document link	Self Appraisal Score	Verified API Score
1	Materials Today Chemistry	Development of Magnetic, Ferrite Supported Palladium Catalysts for 2,4-dinitrotoluene Hydrogenation	2021	<a href="#">View</a>	<a href="#">View</a>	5.00	5.00
2	Renewable Energy	Hydrogen storage between benzene and cyclohexane by Pd/CeO <sub>2</sub> catalyst: Effect of CeO <sub>2</sub> support structure	2020	<a href="#">View</a>	<a href="#">View</a>	5.00	5.00
3	Applied Catalysis B: Environmental	Mechanistic and kinetic insights into the catalytic wet air oxidation of ciprofloxacin by metal supported on carbon nanospheres	2019	<a href="#">View</a>	<a href="#">View</a>	5.00	5.00
4	Chemical Engineering Communications	On the kinetics of wet oxidation of imidazole over Ru/C catalyst	2018	<a href="#">View</a>	<a href="#">View</a>	5.00	5.00
					Total	20.00	

CATEGORY III-C: Research Projects

III-C (i): Sponsored Project

Sl. No.	Area of the Applicant	Title of the Project	Name of the Funding Agency	Duration (no.of years)	Grant Sanctioned (in Lakhs)	Upload Grant Letter link	Self Appraisal Score	Verified API Score
1	Engineering & Technology	Catalytic Wet Air Oxidation of Toxic Organic Waste in Industrial Effluent and Catalyst Deactivation Study	RUSA	1	8.00	<a href="#">View</a>	15.00	15.00
2	Engineering & Technology	Sustainable production of platform chemicals and fuel additives from lignocellulosic agro-industry wastes	Department of Science & Technology and Biotechnology	3	14.98	<a href="#">View</a>	15.00	15.00
3	Engineering & Technology	Development of novel multi-functional hybrid materials for applications in sustainable catalytic conversions and energy storage devices	RUSA	1	7.18	<a href="#">View</a>	15.00	15.00
						Total	45.00	

III-C (ii): Consultancy Project

Sl. No.	Area of the Applicant	Title of the Project	Name of the Funding Agency	Duration (in months)	Amount Mobilized	Upload Grant Letter link	Self Appraisal Score	Verified API Score
						Total	None	

III-C (iii): Projects Outcome/Output

Sl. No.	Area of the Applicant	Type	Title	Level	Doc.No./ Patent No/ Other ref. no	Status (if patent only)	Upload doc.link	Self Appraisal Score	Verified API Score
1	Engineering & Technology	Patent	Preparation of bifunctional Ru/CeO <sub>2</sub> -SBA-15 catalyst for the production of hydrocarbon fuels from industrial effluents	National	202211020754	Filed	<a href="#">View</a>	20.00	20.00
2	Engineering & Technology	Patent	Gamma radiation shielding material and its preparation thereof	International	347680	Granted	<a href="#">View</a>	30.00	30.00
							<b>Total</b>	<b>50.00</b>	

### III-D: Research Guidance

Sl. No.	Name of the Student	Degree	Title of the Thesis	Status	Document Link	Self API Score	Verified API Score
1	Aritra Das	PhD	A novel approach to biomethane synthesis after pretreatment of agricultural wastes through catalytic anaerobic digestion	Degree awarded	<a href="#">View</a>	15.00	15.00
2	Sourav Nag	PhD	Studies on high voltage cathode materials for advanced lithium-ion battery	Thesis submitted	<a href="#">View</a>	10.00	10.00
3	Dilip Kumar Mondal	PhD	Development of silica mesoporous material supported Ru catalyst for oxidation of phenol	Degree awarded	<a href="#">View</a>	15.00	15.00
4	Puspendu Barman	PhD	Removal of toxic carboxylic acid in industrial effluent by advanced oxidation method	Ph.D Registered	<a href="#">View</a>	5.00	5.00
5	Eshita Saha	ME	Novel pretreatment method for biofuel production from rice straw	Degree awarded	<a href="#">View</a>	5.00	5.00
6	Rupam Das	ME	Waste water treatment by advance oxidation method	Degree awarded	<a href="#">View</a>	5.00	5.00
7	Monidipa Bose	ME	Advance pretreatment of lignocellulosic agricultural residues for biofuel production	Degree awarded	<a href="#">View</a>	5.00	5.00
8	Mekhala Mitra	ME	Removal of highly toxic organic com- pounds from industrial effluent using adva- nce oxidation method	Degree awarded	<a href="#">View</a>	5.00	5.00
					<b>Total</b>	<b>65.00</b>	

**III-E : Fellowships, Awards and Invited lectures delivered in conferences / seminars****III-E : (i) Fellowship / Award from Academic Bodies/Associations**

Sl. No.	Type	Name of the Fellowship/Award	Name of the Awarding Body/Association	Level	Document Link	Self Appraisal Score	Verified API Score
1	Award for academic bodies/ Association	Chemical Weekly Award for the Best Paper published in the Indian Chemical Engineer journal in its issues for 2018	IChE	International	<a href="#">View</a>	15.00	15.00
2	Award for academic bodies/ Association	IChE NRC Award Best Paper in Indian Chemical Engineer journal 2018	IChE	International	<a href="#">View</a>	15.00	15.00
3	Award for academic bodies/ Association	Kuloor Memorial Award for the Best Technical Paper published in the Indian Chemical Engineer journal in its issues for 2018	IChE	International	<a href="#">View</a>	15.00	15.00
					<b>Total</b>	<b>45.00</b>	

**III-E : (ii) Invited Lecture / Paper presented**

Sl. No.	Type	Title of the Lecture/Paper	Name of the Conference/ Seminar/ Workshop	Organized by	Venue	Duration of Seminar/ Workshop	Level	Document Link	Self Appraisal Score	Verified API Score
1	Invited Lecture	Advanced Oxidation of Phenol over MCM-41 supported Ru Catalyst in a Fixed Bed Flow Reactor	Advanced Oxidation Processes for Environmental Remediation (AOPER-2022)	NIT-Rourkela	Department of Chemical Engineering	7	National	<a href="#">View</a>	5.00	5.00
2	Paper presented	Decrystallization of cellulose using ammonia and ammonia salt pretreatment method and enhanced sugar synthesis at low enzyme loading	IChEC 2022	IIT-Patna	Deptt. of Chemical and Biochemical Engg.,	2 days	International	<a href="#">View</a>	5.00	5.00
								<b>Total</b>	<b>10.00</b>	

**III-E (iii): e-Learning Delivery Process/Material**

<b>Sl. No.</b>	<b>Name of the Module</b>	<b>Name of the Course</b>	<b>Name of the Program</b>	<b>Document Link</b>	<b>Self Appraisal Score</b>	<b>Verified API Score</b>
1	elective	Catalytic Processes for Green Energy	Elective for undergraduate ( 4th year)	<a href="#">View</a>	10.00	10.00
				<b>Total</b>	<b>10.00</b>	



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**SHYAMAL ROY - Final Report**

<b>Stage / Designation From:</b>	Assistant Prof. (Stage 2)
<b>Stage / Designation To:</b>	Assistant Prof. (Stage 3)
<b>Date of last promotion, ( if any ) :</b>	30-10-2017
<b>Date of eligibility for promotion :</b>	30-10-2022
<b>Assessment Period (no.of years):</b>	5

**API Score Summary**

<b>Category</b>	<b>Period</b>	<b>Self Appraisal Score</b>	<b>Status</b>
I	Yearly	100.00	Criteria Satisfied
II	Assessment Period	225.00	Criteria Satisfied
III	Assessment Period	683.71	Criteria Satisfied
II + III	Assessment Period	908.71	Criteria Satisfied

*Shyamal Roy*

Signature of Applicant



JADAVPUR UNIVERSITY  
KOLKATA - 700032

## Career Advancement Scheme(CAS) Forwarding Letter

To  
The Registrar  
Jadavpur University

Dear Madam,

✓  
Prof./Dr./Mr./Ms. SHYAMAL ROY, a faculty member in the  
Department/School of CHEMICAL ENGINEERING, is applying for promotion  
under the "Career advancement scheme(CAS)" from Assistant Prof. (Stage  
2) to Assistant Prof. (Stage 3).

I forward his/her application for submission to the University and for due  
consideration.

Thanking you

  
(Head of the Department/Director of School)

Date: 25.02.2023

Seal

HEAD  
CHEMICAL ENGINEERING DEPARTMENT  
JADAVPUR UNIVERSITY  
Kolkata-700 032