NOMINATION FORM -13

Prof Shyamal Kanti Sanyal Memorial Award

For the Best Ph. D. Thesis in the area of Membranes Research with Significant Commercial Potential.

Objective: This award has been created in the memory of Prof. Shyamal Kanti Sanyal, former Vice-Chancellor and Professor of Chemical Engineering at Jadavpur University, Calcutta. It is hoped that this award would motivate young researchers to seriously consider the scale-up potential of their research and commercialization of the same leading to entrepreneurial drive among chemical engineering doctoral candidates and spurring industry-academia partnerships as Prof. Sanyal had envisioned.

Criteria: This award seeks to recognize outstanding PhD Candidates for PhD thesis submitted in the period from 1st January of preceding two years up to 30th April of the current year and patents / commercial applications based upon it OR in the process of final submission (with at least three years research experience) and which has completed the pre-submission presentation of 5000 word of the doctoral thesis six months (at most) earlier than the 30th April of the current year.

(N.B. Make use of this format to prepare 5 nos. of hard copies of the nomination papers including all appendices and one set of reprints or related documents along with a soft copy in CD. Submit one copy of the thesis. Do not type on this form)

01. Name of the Nominee:
02. Category of Membership and Membership Number of IIChE:
03. Whether the Institute/Organization of the nominee/sponsor is Organizational Member of IChE (Yes/No):
04. Complete Address for Correspondence:
   a) Works:
   ____________________________________________________________
   ____________________________________________________________
   Tel: ________________________ Fax: ________________________
   Email:
   b) Residence:
   ____________________________________________________________
   ____________________________________________________________
   Tel: ________________________ Fax: ________________________
   Email:

05. Date of Birth:
06. Academic qualifications beginning with Bachelor’s Degree: (Appendix 1)
07. Professional experience: (Appendix 2)
08. Present post and name of employer:
09. Name of the Institution/Organization where the Doctoral Research was conducted.
10. Date of Submission of Thesis or the date pre-submission of 5000 word (document to be submitted):

11. Outstanding achievements in research of the nominee in 300 words (**Appendix 3**).
   (This should reflect on Developing cost-effective Membrane Technology especially for Water treatment, Gas/liquid separation and Air purification, which has the potential of scaling up and commercial application in fields including membrane materials, process pre-treatment and in areas like pervaporation, organic solvent nanofiltration and others improving upon the overall process economics through indigenization, quality improvement, longer life and energy consumption etc).

12. Discuss the nature of contributions/innovations as regards to the following in each paragraph consisting of:
   (i) Fundamental/theoretical contributions/new theories
   (ii) Experimental/ applied research/new insight in experimental analysis
   (iii) Patents acquired/applied
   (iv) Is any of the research contributions mentioned in the thesis is commercialized? If yes, give the details keeping in view the following and the supporting documents from the industry:
   [Write within 300-500 words]
   a. What are the commercially attractive features of this research?
   b. In what ways is the membrane material/process developed by the researcher(s) superior to other competing technologies?
   c. Have any scale-up attempts (pilot scale) been made on this research so far? If no, are there any such plans in future and where and how do the involved researchers anticipate performing such pilot experiments?
   d. What steps have the researchers taken to ensure robustness/reproducibility of the results?
   e. Have the researchers performed any techno-economic feasibility studies for this particular research (please describe the findings, in short).
   f. Are any of the involved researchers interested in any entrepreneurial ventures based out of this research? Please also mention, if any form of institutional support is available for such endeavors? If not, how do the researchers plan to seek venture capital?
   g. Have the involved researchers filed patents based on this particular work/technology?
   h. Has the award recipient submitted/published papers as *first author* in peer-reviewed journals? Please provide citation details of the submitted paper/papers.
   i. Has the award recipient presented his/her research work in national or international conferences? Please specify.

13. Summary of contributions and innovations in the form of a citation (150 words) (**Appendix 4**)

14. If any of the publications has co-authors from outside the nominee’s institution, what is the nature of the persons’ contributions?

15. Awards/Honours/Recognitions of the nominee (**Appendix 6**)
   Whether the achievements have already been recognized by awards (to any team Member or the nominee alone) by any learned body; and if so, the name of the body, the award and the year of award may be given (Attach a copy of the citation, if any).

16. Seminars/ Conferences attended and details of talks given (**Appendix 7**)
   (a) Details of talk on the concerned process/product innovation
   (b) Titles of seminars/speeches given or presentations made before learned bodies/ associations/ other institutes as invited speaker/ guest of honour/chairmanship of sessions of national and international symposia, etc.
   (c) Papers presented in conferences and symposia (Give the details including names of co-authors)
17. Details of patents taken, if any (Appendix 9)
18. If selected for the award, the nominee will be required to give an oration in the Annual Congress- CHEMCON held in the month of December.

Give the tentative title of the talk on area of research for a duration of 15 - 20 minutes (if the nominee has already informed the sponsor). If the nominee does not know that he is being nominated or may be he/she is abroad and/ or not accessible then, it should be stated accordingly."

"I, the sponsor, hereby declare that the information provided above is true and believe by bestowing this award to the nominee, the IIChE's image will be enhanced. I also state that I am not the office bearer of the IIChE at the national or regional level."

Name and Signature of the Sponsor/Research Guide

Designation, employment and complete address of the sponsor including telephone

IIChE Membership Number: Place & Date

N.B.: The Institute/Organization, to which the awardee/sponsor belongs should preferably become an Organizational Member of IIChE.

GENERAL INSTRUCTIONS AND INFORMATION

1. There is no restriction on the number of nominations submitted by a particular institute but there should be only one nomination per Guide. In some cases, the person may be a self-guide for which the Head of the Institute should nominate him/her.

2. This award is strictly meant for promoting talent in the country and thus it is expected that the authors of the papers are based in India and genuinely the contributors to the publication.

3. The current value of the total award is Rs.15,000/- to be given to the nominee along with a Memento and Certificate. Travel and other expenses for this purpose will have to be borne by the recipient of the award.

4. No council member or the member of the judges/awards committee can nominate anybody for the award in their individual capacity. In case of nominations from the organizations of the members of the Awards Committee, the concerned member will refrain from making any judgment for the particular award. However, Heads of Institutes can nominate the best thesis from their organizations which might have been guided by the Council member of the IIChE including the office bearers of the IIChE, both of the concerned Regional Centre and/or National Body.

5. The sponsor must be a corporate member of the IIChE for this award. Persons of eminence, who may or may not be members of the IIChE, who hold equally important positions and those who are in such capacities as Managing Director/Chairman/ President/Director of any Industry/ Educational/Research Institute/ Padma Awardee/ Director Generals/Director of National Laboratories/Secretaries of Govt. Departments/Past Presidents of the IIChE or sister bodies/ Past Presidents of industrial organizations can nominate only the deserving individuals.

6. The award winner will be required to make a presentation of 15 - 20 minutes on his research in one of the sessions during the Chemcon. If he/she cannot attend then the research guide will present the work.

7. The award winner's thesis and the publications will be a property of the IIChE.

8. In case of any query, contact the Hon. Secretary, Head Office at the above address.

9. The last date for all nominations will be June 30, every year as a general practice.