

NAME	Dr. Manoranjan Nayak	
DESIGNATION	Associate Professor & Ramalingaswami Fellow	
EMAIL ID	nayakimmt@gmail.com; mnayak@amity.edu	
CONTACT NUMBER	+91-9437-365-531	
MAILING ADDRESS	J-3 Block, Ground Floor, Lab # 08 & Room # 12	
RESEARCH INTERESTS	Green Process & Product Development; Microalgal Biorefinery & Bioenergy - Biofuels, Bio-CCS & Waste Valorization; Environmental biotechnology and applied microbiology.	

EDUCATIONAL QUALIFICATIONS:

Name of College / University	Degree	Year
Utkal University	Ph.D. in Biotechnology	2014
North Orissa University	M.Sc. in Biotechnology	2007
Fakir Mohan University	B.Sc. in Botany (Hons.)	2005

Title of Ph.D. thesis: Biotechnological approach for biodiesel production from microalgae isolated from eastern region of India

EXPERIENCE (in chronological order)

Designation	Type of post held	Name of the Institute	Year (From – To)
Associate Prof. & Ramalingaswami Fellow	Teaching, Research & Supervisory	Amity Institute of Biotechnology, AUUP, Noida (Delhi NCR), India	February 23, 2021 – Continuing (Till Date)
Ramalingaswami Fellow (Research Asst. Professor)	Research & Supervisory	School of Energy Science and Engineering, IIT Kharagpur, India	September 06, 2019 – February 22, 2021
Post-Doctoral Senior Researcher	Research	Advanced Biomass R&D Center & Dept of Chemical and Biomolecular Eng., KAIST, Republic of Korea	August 16, 2016 – August 30, 2019
Post-Doctoral Research Associate	Research	Department of Biotechnology, IIT Kharagpur, India	February 05, 2014 – August 05, 2016
Project Scientist	Research	Institute of Life Science (DBT), Bhubaneswar, India	November 01, 2013 – February 04, 2014
Research Fellow	Research	Institute of Minerals & Materials Technology (CSIR), Bhubaneswar, India	August 26, 2009 – July 31, 2013
Graduate Assistant	Research	Central Rice Research Institute (ICAR), Cuttack, India	August 22, 2008 – December 31, 2008
BITP - BCIL (DBT) Trainee	Research	Juan Biotechnology Pvt. Ltd., Bhubaneswar, India	December 03, 2007 – June 02, 2008

Post-Doc.	1 (completed) ➤ Dr. RK Mohapatra
Ph.D. candidates	3 (Ongoing) ➤ Ms. Diptymayee Padhi Enrolment No.: A0517322001 Education: MSc in Biotechnology, OUAT, Bhubaneswar Research Area: CO ₂ sequestration ➤ Ms. Shatakshi Kashyap Enrolment No.: A0517322008 Education: MSc in Microbiology, Central University of Punjab Research Area: Wastewater treatment ➤ Ms. Nisha Das Enrolment No.: A0517322005 Education: MSc in Chemistry, OUAT, Bhubaneswar Research Area: Waste valorization
Master candidate	9 (Ongoing) ➤ Ms Chanchal Choudhary ➤ Ms Anamika Binu ➤ Ms Bhawna ➤ Ms Diksha Dey ➤ Ms Priti Giri ➤ Ms Harpreet Kaur ➤ Ms Bishmita Gogoi ➤ Ms Mitali Panda ➤ Ms Saumya Pahariya ➤ Mr Abiraj V ➤ Mr Sushant K Das ➤ Ms Pooja Belwal ➤ Ms. Shruti Varshney ➤ Ms Tejaswi Mudadla 3 (completed) ➤ Ms Kanishka Mehta ➤ Ms Priya Pahuja ➤ Ms Tapoja Saha ➤ Ms Aditi Mohan ➤ Mr Harsh Abhinab ➤ Ms Anjali Jangra
Integrated	9 (Ongoing) ➤ Ms Swati Rai ➤ Mr Ayush Pandey ➤ Ms Unnati Srivastava ➤ Ms Shreya Singh ➤ Ms Lavanya Singh 1 (completed) ➤ Mr Venkatesh Anand Iyer
Undergraduate	1 (Ongoing) ➤ Ms Samridhi Ojha ➤ Ms Tanishka Sharma ➤ Ms Gargi Srivastav 1 (completed) ➤ Ms. Shivangi Ojha
PUBLICATIONS (28)	RESEARCH PUBLICATIONS IN PEER-REVIEWED JOURNALS <u><i>Publications details after PhD program</i></u> 2023 • Rawat J, Jaiswal KK, Das N, Kumar S, Gururani P, Bisht B, Vlaskin MS, Nayak M , Kumar V (2023) Hydrothermal

liquefaction nanoparticle as a catalyst. Energy Sources, Part A: Recovery, Utilization, and Environmental Effects, 45:4, 12988-13000. (IF – 2.902).

ISSN/ eISSN No.: 1556-7036 / 1556-7230

doi: <https://doi.org/10.1080/15567036.2023.2277892>

Name of Publisher Address: Taylor & Francis Inc, 530 Walnut Street, Ste 850, Philadelphia, USA, PA, 19106

Web

Site:

<https://www.tandfonline.com/doi/full/10.1080/15567036.2023.2277892>

- Mohanty R, **Nayak M***, Sekar T, Thirunavoukkarasu M (2023) Adsorption of selenium greener phytoremediation strategy. Bulletin of Environmental Contamination and Toxicology, 110:54. (IF – 2.807).

ISSN/ eISSN No.: 0007-4861 / 1432-0800

doi: <https://doi.org/10.1007/s00128-023-03694-9>

Name of Publisher Address: Springer, One New York Plaza, Suite 4600, New York, United States, NY, 10004

Web Site: <https://www.springer.com/journal/128>

2022

- **Nayak M***, Suh WI, Oh YT, Ryu AJ, Jeong KJ, Kim M, Mohapatra R, Lee B, Chang YK (2022) Directed evolution cell sorting based screening. Fuel, 316: 123410. (IF – 8.035).

ISSN/ eISSN No.: 0016-2361 / 1873-7153

doi: <https://doi.org/10.1016/j.fuel.2022.123410>

Name of Publisher Address: Elsevier Sci Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB

Web Site: <https://www.journals.elsevier.com/fuel>

- Ray A, **Nayak M***, Ghosh A (2022) A review on co-culturing biofuel production. Science of the Total Environment, 802: 149765. (IF – 10.753).

ISSN/ eISSN No.: 0048-9697 / 1879-1026

doi: <https://doi.org/10.1016/j.scitotenv.2021.149765>

Name of Publisher Address: Elsevier, Radarweg 29, Amsterdam, Netherlands, 1043 NX

Web Site: <https://www.journals.elsevier.com/science-of-the-total-environment>

- Mohapatra RK, Padhi D, Sen R, **Nayak M*** (2022) Bio-inspired CO₂ capture environmental protection. Bioresource Technology Report, 19: 101116. (Cite Score – 6.3).

ISSN/ eISSN No.: 2589-014X

doi: <https://doi.org/10.1016/j.biteb.2022.101116>

Name of Publisher Address: Elsevier Sci Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB

Web Site: <https://www.journals.elsevier.com/bioresource-technology-reports>

- Kim HS, Kim M, Park W-K, Yang W-G, **Nayak M**, Shin HH,

Cho K, Kim D, Oda T (2022) Microalgae as an in aquatic environment. *Energies*, 15: 4467. (IF – 3.252).

ISSN/ eISSN No.: 1996-1073

doi: <https://doi.org/10.3390/en15124467>

Name of Publisher Address: MDPI, St Alban-Anlage 66, Basel, Switzerland, CH-4052

Web Site: <https://www.mdpi.com/journal/energies>

- Behera ID, **Nayak M**, Mishra A, Meikap BC, Sen R (2022) Strategic implementation aquatic environment. *Marine Pollution Bulletin*. (IF – 7.001).

ISSN/ eISSN No.: 0025-326X / 1879-3363

doi: <https://doi.org/10.1016/j.marpolbul.2022.113492>

Name of Publisher Address: Elsevier, Radarweg 29, Amsterdam, Netherlands, 1043 NX

Web Site: <https://www.journals.elsevier.com/marine-pollution-bulletin>

2021

- Behera ID, **Nayak M**¹, Biswas S, Meikap BC, Sen R (2021) Enhanced biodegradation bacterial consortium. *Journal of Environmental Management*, 292: 112746. (IF – 8.91).

ISSN/ eISSN No.: 0301-4797 / 1095-8630

doi: <https://doi.org/10.1016/j.jenvman.2021.112746>

Name of Publisher Address: Academic Press Ltd- Elsevier Science Ltd, 24-28 Oval Rd, London, England, NW1 7DX

Web Site: <https://www.journals.elsevier.com/journal-of-environmental-management>

- Kim M, Kim D, Cho JM, Nam K, Lee H, **Nayak M**, Han JI, OH HM, Chang YK (2021) Hydrodynamic cavitation sustainable *Ettlia* sp. cultivation. *Journal of Environmental Chemical Engineering*, 9: 105411. (IF – 7.968).

ISSN/ eISSN No.: 2213-2929 / 2213-3437

doi: <https://doi.org/10.1016/j.jece.2021.105411>

Name of Publisher Address: Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB

Web Site: <https://www.journals.elsevier.com/journal-of-environmental-chemical-engineering>

2020

- **Nayak M**^{*}, Suh WI, Cho JM, Kim, HS, Lee B, Chang YK (2020) Strategic implementation ... biofuel applications. *Journal of Environmental Management*, 271: 111041. (IF – 8.91).

ISSN/ eISSN No.: 0301-4797 / 1095-8630

doi: <https://doi.org/10.1016/j.jenvman.2020.111041>

Name of Publisher Address: Academic Press Ltd- Elsevier Science Ltd, 24-28 Oval Rd, London, England, NW1 7DX

Web Site: <https://www.journals.elsevier.com/journal-of-environmental-management>

2019

- **Nayak M**, Suh WI, Chang YK, Lee B (2019) Exploration of two-stage in *Chlorella* sp. HS2. *Bioresource Technology*, 276: 110-118. (IF – 11.889).
ISSN / eISSN No.: 0960-8524 / 1873-2976
doi: <https://doi.org/10.1016/j.biortech.2018.12.111>
Name of Publisher Address: Elsevier Sci Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB
Web Site: <https://www.journals.elsevier.com/bioresource-technology>
- **Nayak M**, Rashid N, Suh WI, Lee B, Chang YK (2019) Performance evaluation water reusability. *Renewable Energy*, 136: 819-827. (IF – 8.634).
ISSN / eISSN No.: 0960-1481
doi: <https://doi.org/10.1016/j.renene.2019.01.050>
Name of Publisher Address: Pergamon-Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB
Web Site: <https://www.journals.elsevier.com/renewable-energy>
- **Nayak M***, Swain DK, Sen R (2019) Strategic valorization of rice (*Oryza sativa* L.) crop. *Science of the Total Environment*, 682: 475-484. (IF – 10.753).
ISSN / eISSN: 0048-9697 / 1879-1026
doi: <https://doi.org/10.1016/j.scitotenv.2019.05.123>
Name of Publisher Address: Elsevier, Radarweg 29, Amsterdam, Netherlands, 1043 NX
Web Site: <https://www.journals.elsevier.com/science-of-the-total-environment>
- Rashid N, **Nayak M**, Lee B, Chang YK (2019) Efficient microalgae growth medium. *Journal of cleaner production*, 234: 150-156. (IF - 11.072).
ISSN / eISSN: 0959-6526 / 1879-1786
doi: <https://doi.org/10.1016/j.jclepro.2019.06.154>
Name of Publisher Address: Elsevier Sci Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB
Web Site: <https://www.journals.elsevier.com/journal-of-cleaner-production>
- Rashid N, **Nayak M**, Suh WI, Lee B, Chang YK (2019). Efficient microalgae of organic matter. *Environmental Science and Pollution Research*, 26: 27396-27406. (IF - 5.19).
ISSN / eISSN: 0944-1344 / 1614-7499
doi: <https://doi.org/10.1007/s11356-019-05904-6>
Name of Publisher Address: Springer Heidelberg, Tiergartenstrasse 17, Heidelberg, Germany, D-69121
Web Site: <https://www.springer.com/journal/11356>

2018

- **Nayak M**, Suh WI, Lee B, Chang YK (2018) Enhanced carbon

utilization carbon dioxide. Energy Conversion and Management, 156: 45-52. (IF – 11.533).

ISSN / eISSN: 0196-8904 / 1879-2227

doi: <https://doi.org/10.1016/j.enconman.2017.11.002>.

Name of Publisher Address: Pergamon-Elsevier Science Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, OX5 1GB

Web Site: <https://www.journals.elsevier.com/energy-conversion-and-management>

- **Nayak M***, Dhanarajan G, Dineshkumar R, Sen R (2018) Artificial intelligence algal biorefinery. Journal of cleaner production, 201: 1092-1100. (IF – 11.072).

ISSN / eISSN: 0959-6526 / 1879-1786

doi: <https://doi.org/10.1016/j.jclepro.2018.08.048>

Name of Publisher Address: Elsevier Sci Ltd, The Boulevard, Langford Lane, Kidlington, Oxford, England, Oxon, OX5 1GB

Web Site: <https://www.journals.elsevier.com/journal-of-cleaner-production>

2016

- **Nayak M**, Karemore A, Sen R (2016) Sustainable valorizationopen reactor systems. RSC Advances, 6 (94): 9111-91120. (IF – 4.036).

ISSN No.: 2046-2069

doi: <http://dx.doi.org/10.1039/c6ra17899e>

Name of Publisher Address: Royal Soc Chemistry, Thomas Graham House, Science Park, Milton RD, Cambridge, England, Cambs, CB4 0WF

Web Site: <https://www.rsc.org/journals-books-databases/about-journals/rsc-advances/>

- **Nayak M**, Karemore A, Sen R (2016) Performance evaluation of biofuel application. Algal Research-Biomass Biofuels and Bioproducts. 16: 216-223. (IF – 5.276).

ISSN No.: 2211-9264

doi: <http://dx.doi.org/10.1016/j.algal.2016.03.020>.

Name of Publisher Address: Elsevier, Radarweg 29, Amsterdam, Netherlands, 1043 NX

Web Site: <https://www.journals.elsevier.com/algal-research>

- Karemore A, **Nayak M**, Sen R (2016) Recent inventions biofuels research. Recent Patents on Biotechnology. 10 (1): 30-42.

ISSN / eISSN: 1872-2083 / 2212-4012

doi: <http://dx.doi.org/10.2174/1872208310666160830164929>

Name of Publisher Address: Bentham Science Publishers, Executive Suite Y – 2, Building Y, Saif Zone, Sharjah, U.A.E

Web Site: <https://benthamscience.com/journals/recent-patents-on-biotechnology/>

2016

- **Nayak M**, Thirunavoukkarasu M, Mohanty RC (2016) Cultivation of freshwater lipid yield. Journal of General and Applied Microbiology. 62 (1): 7-13 (IF - 1.356).
ISSN / eISSN: 0022-1260 / 1349-8037
doi: <http://dx.doi.org/10.2323/jgam.62.7>.
Name of Publisher Address: Microbiol Res Foundation, Japan Acad Soc Center Bldg 4-16 Yayoi 2-Chome, Tokyo, Japan, 113-0032
Web Site: <https://www.jstage.jst.go.jp/browse/jgam>

2013

- **Nayak M***, Rath SS, Thirunavoukkarasu M, Panda PK, Mishra BK, Mohanty RC (2013) Maximizing biomass using sodium hydroxide. Journal of Microbiology and Biotechnology. 23 (9): 1260-1268. (IF - 3.277).
ISSN / eISSN: 1017-7825 / 1738-8872
doi: <http://dx.doi.org/10.4014/jmb.1302.02044>.
Name of Publisher Address: Korean Soc Microbiology & Biotechnology, Korea Sci Technol Center #507, 635-4 Yeogsam-Dong, Kangnam-Gu, Seoul, South Korea, 135-703
Web Site: <http://www.jmb.or.kr/>

2012

- Jena J, **Nayak M**, Panda HS, Pradhan N, Sarika C, Panda PK, Rao BVSK, Prasad RBN, Sukla LB. (2012) Microalgae of biodiesel production. World Environment. 2 (1): 11-16.
ISSN / eISSN: 2163-1573 / 2163-1581
doi: <http://dx.doi.org/10.5923/j.env.20120201.03>.
Name of Publisher Address: Scientific & Academic Publishing Co., 1200 Rosemead Blvd, STE D #105, Rosemead, CA, 91731, USA
Web Site:
<http://www.sapub.org/journal/aimsandscope.aspx?journalid=1004>

2011

- **Nayak M**, Jena J, Bhakta S, Rath SS, Sarika C, Rao BVSK, Pradhan N, Thirunavoukkarasu M, Mishra SK, Panda PK, Prasad RBN, Sukla LB, Mishra BK (2011) Screening of biodiesel production. International Journal of Green Energy. 8 (6): 669-683. (IF - 3.206).
ISSN / eISSN: 1543-5075 / 1543-5083
doi: <http://dx.doi.org/10.1080/15435075.2011.588764>
Name of Publisher Address: Taylor & Francis Inc, 530 Walnut Street, STE 850, Philadelphia, USA, PA, 19106
Web Site: <https://www.tandfonline.com/toc/ljge20/current>
- Panda HS, **Nayak M**, Das B, Parida BK, Jena J, Bhakta S, Panda S, Panda PK, Sukla LB (2011) Survey and documentation east coast region of Odisha, India. World Environment.1 (1): 20-23.

	<p>ISSN / eISSN: 2163-1573 / 2163-1581 doi: http://dx.doi.org/10.5923/j.env.20110101.04. Name of Publisher Address: Scientific & Academic Publishing Co., 1200 Rosemead Blvd, STE D #105, Rosemead, CA, 91731, USA Web Site: http://www.sapub.org/journal/aimsandscope.aspx?journalid=1004</p> <ul style="list-style-type: none"> • Bhakta S, Das SK, Nayak M, Jena J, Panda PK, Sukla LB (2011) Phyco-diversity assessment coast of Odisha, India. Recent Research in Science and Technology. 3 (4): 80-89. ISSN No.: 2076-5061 Name of Publisher Address: Update Publishing House, 1/87, Moolaipallipatty, Rasipuram, Namakkal– 637406, Tamil Nadu, India Web Site: https://updatepublishing.com/journal/index.php/rrst/ https://updatepublishing.com/journal/ <p>RESEARCH PUBLICATION IN BOOK CHAPTER</p> <ul style="list-style-type: none"> • Mohapatra RK, Nayak M, Panda CR, Thatoi H <i>Title, page number with year:</i> Estimation of population Paradip Harbour region, Odisha, India. pp. 493-507 (2023). <i>Book title, editor and publisher:</i> Green Technologies for Environmental Management, Biswal AK and Thatoi H and Daya publishing house, New Delhi. <i>Publication Category:</i> National Publisher/ Chapters in edited book ISBN: 9789354613791 • Sukla LB, Nayak M, Jena J, Panda HS, Pradhan N, Panda PK, Mishra SK, Das B, Sarika C, Rao BVSK, Prasad RBN, Mishra BK <i>Title, page number with year:</i> Large scale biodiesel production. pp. 79-91 (2013). <i>Book title, editor and publisher:</i> Environmental Technology, Khanna D.R., Chopra A.K., Matta G., Bhutiani R., Singh V. and Daya publishing house, New Delhi. <i>Publication Category:</i> National Publisher/ Chapters in edited book ISBN: 9788170358237
<p>ACADEMIC SEMINAR/ CONFERENCE PRESENTATIONS (34)</p>	<p>ACADEMIC SEMINAR/ CONFERENCE PRESENTATIONS</p> <ol style="list-style-type: none"> 1. Nayak M*. Title of the Paper Presented: A greener approach microalgal technology. Name of conference/ seminar: Revealing a New Paradigm of Biology in the 21st Century: A Cellular and Molecular Approach. Type: Oral presentation Date of the Event: April 08–09, 2021.

Organised by and venue: Amity University Uttar Pradesh (Online: Live and On-demand).

Level of Organization: International (within country)

2. **Nayak M***.

Title of the Paper Presented: Application of for biodiesel production.

Name of conference/ seminar: 5th Green and Sustainable Chemistry Conference.

Type: Poster presentation

Date of the Event: November 10–11, 2020.

Organised by and venue: Elsevier (Online: Live and On-demand).

Level of Organization: International (abroad)

3. **Nayak M***, Lee B, Chang YK.

Title of the Paper Presented: Optimizing carbon of *Chlorella* sp. HS2.

Name of conference/ seminar: KMB 2019, 46th Annual Meeting & International Symposium.

Type: Poster presentation

Date of the Event: June 23–25, 2019.

Organised by and venue: The Korean Society for Microbiology and Biotechnology (at ICC JEJU, South Korea).

Level of Organization: International (abroad)

4. **Nayak M***, Rashid N, Suh WI, Lee B, Chang YK.

Title of the Paper Presented: Evaluation of different carbon condition.

Name of conference/ seminar: 2nd International conference on “Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability”.

Type: Poster presentation

Date of the Event: September 16–19, 2018.

Organised by and venue: Elsevier (at Sitges, Spain).

Level of Organization: International (abroad)

5. **Nayak M***, Sen R.

Title of the Paper Presented: Microalgae cultivation biomass production.

Name of conference/ seminar: Bioprocessing INDIA.

Type: Oral presentation

Date of the Event: December 17–20, 2014.

Organised by and venue: Institute of Chemical Technology and Indian Institute of Technology Bombay, Mumbai, India.

Level of Organization: National

6. **Nayak M***, Jena J, Thirunavoukkarasu M, Pradhan N, Panda PK, Sukla LB, Mishra BK, Mohanty RC.

Title of the Paper Presented: Mass cultivation biodiesel production.

Name of conference/ seminar: International Conference on “Microbial World: Recent Innovations and Future Trends”.

Type: Poster presentation

Date of the Event: November 22–25, 2012.

Organised by and venue: KIIT University, Bhubaneswar, India.

Level of Organization: International (within country)

7. **Nayak M***, Mohanty RC, Sukla LB.

Title of the Paper Presented: Scale-up and design biodiesel

production.

Name of conference/ seminar: National Seminar on Global warming: from facts and figures to cause & cures.

Type: Oral presentation

Date of the Event: November 20–21, 2011.

Organised by and venue: Chitalo Mohavidyalaya, Jajpur, Odisha, India.

Level of Organization: National

8. **Nayak M***, Jena J, Sukla LB, Panda PK, Sarika C, Rao BVSK, Prasad RBN.

Title of the Paper Presented: Carbon dioxide microalgae *Scenedesmus obliquus*.

Name of conference/ seminar: International Conference on “Innovations in Oils, Fats & Allied Products towards Sustainability” & “Lipids Expo-2011”.

Type: Poster presentation

Date of the Event: November 18–19, 2011.

Organised by and venue: Oil Technologists Association of India, Southern Zone (at Indian Institute of Chemical Technology, Hyderabad, India).

Level of Organization: International (within country)

9. Sukla LB, **Nayak M***, Jena J, Pradhan N, Panda PK, Mishra SK, Das B, Sarika C, Rao BVSK, Prasad RBN, Mishra BK.

Title of the Paper Presented: Large scale biodiesel production.

Name of conference/ seminar: World congress for man and nature: global climate change & biodiversity conservation.

Type: Oral presentation

Date of the Event: November 11–13, 2011.

Organised by and venue: Gurukula Kangri Vishwavidyalaya, Haridwar, India.

Level of Organization: National

10. **Nayak M***, Jena J, Bhakta S, Das B, Pradhan N, Panda PK, Sukla LB.

Title of the Paper Presented: Microalgae as biodiesel production.

Name of conference/ seminar: National Conference on “New frontiers in life sciences”.

Type: Oral presentation

Date of the Event: December 09-11, 2010.

Organised by and venue: Indian Science Congress Association: Bhubaneswar Chapter and Indian Society of Life Sciences (at Regional Museum of Natural History, Bhubaneswar, India).

Level of Organization: National

11. **Nayak M***, Jena J, Ratha SK, Majhi K, Mishra N, Behera SK, Pradhan N, Subudhi U, Panda PK, Mishra SK, Thirunavoukkarasu M, Adhikary SP, Sukla LB, Mishra BK.

Title of the Paper Presented: Screening of microalgae for biodiesel.

Name of conference/ seminar: International Symposium on Phycological Research.

Type: Poster presentation

Date of the Event: February 25-27, 2010.

Organised by and venue: Banaras Hindu University, Varanasi, India.

Level of Organization: International (within country)

12. **Nayak M***, Sukla LB.

Title of the Paper Presented: Pilot scale raceway pond.
Name of conference/ seminar: Research scholar day.
Type: Poster presentation
Date of the Event: January 25, 2011.
Organised by and venue: IMMT Bhubaneswar, India
Level of Organization: National

Contribution of BBRL

13. Padhi D, **Nayak M***.
Title of the Paper Presented: Microalgae-based carbon cleaner environment.
Name of conference/ seminar: International Conference on “Advances in Energy and Environment for Sustainable Development (AEESD-2022)”.
Date of the Event: January 7–8, 2022.
Organised by and venue: Siksha ‘O’ Anusandhan (Deemed to be University), Bhubaneswar, India and NIT Meghalaya, India. In Virtual Platform.
Level of Organization: International (within country)
14. Kashyap S, **Nayak M***.
Title of the Paper Presented: Advanced wastewater biofuel production.
Name of conference/ seminar: International Conference on “Advances in Energy and Environment for Sustainable Development (AEESD-2022)”.
Date of the Event: January 07–08, 2022.
Organised by and venue: Siksha ‘O’ Anusandhan (Deemed to be University), Bhubaneswar, India and NIT Meghalaya, India. In Virtual Platform.
Level of Organization: International (within country)
15. Mohapatra RK, **Nayak M**, Thatoi H, Panda CR.
Title of the Paper Presented: Performance evaluation of toxic As(III) ions.
Name of conference/ seminar: 7th International Conference on Environment and Ecology (ICEE) on “Make India clean as well as cleaning up technologies”.
Date of the Event: November 26-28, 2021.
Organised by and venue: International Foundation for Environment and Ecology Kolkata. Virtual Platform – Google Meet.
Level of Organization: International (within country)
16. Padhi D, **Nayak M***.
Title of the Paper Presented: Bio-inspired flue research perspectives.
Name of conference/ seminar: International Symposium of Biotechnology and Biochemical Engineering (ISBBE-2021) on “Waste Management and Innovation for Valorization: Enroute a Sustainable World and Future”.
Date of the Event: October 26–27, 2021.
Organised by and venue: Amity Institute of Biotechnology (Centre for Biotechnology & Biochemical Engineering), AUUP, Noida and Amity University Kolkata. Virtual Platform.
Level of Organization: International (within country)
17. Kashyap S, **Nayak M***.
Title of the Paper Presented: A biorefinery approach biofuel production.
Name of conference/ seminar: International Symposium of Biotechnology and Biochemical Engineering (ISBBE-2021) on “Waste Management and Innovation for Valorization: Enroute a Sustainable World and Future”.
Date of the Event: October 26–27, 2021.
Organised by and venue: Amity Institute of Biotechnology (Centre for Biotechnology & Biochemical Engineering), AUUP, Noida and Amity University Kolkata. Virtual Platform.
Level of Organization: International (within country)
18. Mohapatra RK, **Nayak M**, Thatoi H, Panda CR.
Title of the Paper Presented: Effective bioremoval Paradip Port, India.
Name of conference/ seminar: International Symposium of Biotechnology and Biochemical Engineering (ISBBE-2021) on “Waste Management and

Innovation for Valorization: Enroute a Sustainable World and Future”.

Date of the Event: October 26-27, 2021.

Organised by and venue: Amity Institute of Biotechnology (Centre for Biotechnology & Biochemical Engineering), AUUP, Noida and Amity University Kolkata. Virtual Platform.

Level of Organization: International (within country)

My contribution in other's presentations

19. Rashid N, **Nayak M**, Lee B, Chang YK.
Title of the Paper Presented: Efficient microalgae organic matter.
Name of conference/ seminar: 2nd International conference on “Bioresource Technology for Bioenergy, Bioproducts & Environmental Sustainability”.
Date of the Event: September 16–19, 2018.
Organised by and venue: Sitges, Spain.
Level of Organization: International (abroad)
20. Jena J, **Nayak M**, Panda HS, Pradhan N, Sukla LB.
Title of the Paper Presented: Effect of nitrogen biodiesel production.
Name of conference/ seminar: International Conference on “Microbial World: Recent Innovations and Future Trends”.
Date of the Event: November 22–25, 2012.
Organised by and venue: KIIT University, Bhubaneswar, India.
Level of Organization: International (within country)
21. Jena J, **Nayak M**, Pradhan N, Panda PK, Sukla LB.
Title of the Paper Presented: Lab scale to biodiesel production: an approach.
Name of conference/ seminar: National Seminar on Living system in post genomic era.
Date of the Event: December 20-21, 2011.
Organised by and venue: Fakir Mohan University, Balasore, India.
Level of Organization: National
22. Jena J, **Nayak M**, Bhakta S, Das B, Nayak RR, Pradhan N, Subudhi U, Panda PK, Mishra SK, Adhikary SP, Sukla LB, Mishra BK.
Title of the Paper Presented: Utilization of microalgae CO₂ fixation.
Name of conference/ seminar: International Symposium on “Recent Advances in Cross-disciplinary Microbiology: Avenues & Challenges”.
Date of the Event: December 14–17, 2010.
Organised by and venue: Ranchi, India (Attended).
Level of Organization: International (within country)
23. Bhakta S, **Nayak M**, Jena J, Pradhan N, Subudhi U, Panda PK, Sukla LB.
Title of the Paper Presented: Diversity of algae areas of Orissa.
Name of conference/ seminar: National Conference on “New Frontiers in Life Sciences & 13th Orissa Bigyan Congress”.
Date of the Event: December 09-11, 2010.
Organised by and venue: Indian Science Congress Association: Bhubaneswar Chapter and Indian Society of Life Sciences (at Regional Museum of Natural History, Bhubaneswar, India).
Level of Organization: National
24. Das B, **Nayak M**, Bhakta S, Jena J, Nayak RR, Subudhi U, Pradhan N, Mishra SK, Panda PK, Sukla LB.
Title of the Paper Presented: Raceway Pond algae cultivation.
Name of conference/ seminar: National Conference on “New Frontiers in Life Sciences & 13th Orissa Bigyan Congress”.
Date of the Event: December 09-11, 2010.
Organised by and venue: Indian Science Congress Association: Bhubaneswar Chapter and Indian Society of Life Sciences (at Regional Museum of Natural History, Bhubaneswar, India).
Level of Organization: National
25. Ratha SK, Jena J, **Nayak M**, Mishra N, Pradhan N, Sukla LB, Panda PK, Thirunavoukkarasu M, Adhikary SP, Mishra BK.

	<p><i>Title of the Paper Presented:</i> Screening and lipid source of biofuel. <i>Name of conference/ seminar:</i> International conference on “Algal Biotechnology in the Asia-Pacific Region: New challenges and Opportunities for the 21st Century”. <i>Date of the Event:</i> December 1-4, 2009. <i>Organised by and venue:</i> New Delhi, India. <i>Level of Organization:</i> International (within country)</p> <p>Conference attend:</p> <ol style="list-style-type: none"> 1. Participated in Science 20 Conference on the theme of "Disruptive Science for Innovation and Sustainable Development" under the aegis of G20, Organized by ‘AUUP, Noida’ on September 04-05, 2023. 2. Participated (and appreciated) in the "International Symposium on Revolutionizing Medicinal Imaging with Computer Vision and Artificial Intelligence", Organized by AIB, AUUP, Noida in association with Indiana University – Purdue University Indianapolis, IUPUI, USA on August 22-25, 2023 at AUUP, India. (Role: Member of the organizing committee) 3. Attend Sci-ROI’s 7th Annual Event 2022 on the theme of "Science and Research Opportunities in India" Organized by ‘Sci-ROI Global’ on September 24-25, 2022. Virtual platform. 4. Attend India's Largest Online Innovation Conference “the Second Edition of Turnip Innovation Festival (TIF)”, on the theme of "Intellectual Property and Climate Change" Organized by ‘Turnip Innovations’ jointly with ‘DPIIT IPR Chair Andhra University’ on January 22, 2022. Virtual platform. 5. International Symposium of Biotechnology and Biochemical Engineering (ISBBE-2021) on “Waste Management and Innovation for Valorization: Enroute a Sustainable World and Future”. October 26–27, 2021. Amity Institute of Biotechnology (Centre for Biotechnology & Biochemical Engineering), AUUP, Noida and Amity University Kolkata. Virtual Platform. 6. Global Bio-India 2021. Transforming Lives. Biosciences to Bioeconomy. Organised by BIRAC – Biotechnology Industry Research Assistance Council and DBT, Govt. of India. March 01-03, 2021. Digital Platform. 7. V International Conference on Sustainable Energy and Environmental Challenges (V SEEC). Organized by International Society for Energy, Environment and Sustainability. December 19–21, 2020. Virtual mode Zoom. 8. KMB 2018, 45th Annual Meeting & International Symposium. Organized by The Korean Society for Microbiology and Biotechnology. June 27–29, 2018. Yeosu EXPO Convention Center, South Korea. 9. KSBB Fall Meeting and International Symposium, Gwangju, South Korea. October 13, 2016.
<p>RESEARCH PROJECTS Ongoing: (1)</p>	<p><u>Ramalingaswami Re-entry Fellowship funded research project</u> <i>Title:</i> An integrated biorefinery flue gas CO₂ fixation <i>Funding Agency:</i> Department of Biotechnology (DBT), Govt. of India., New Delhi Amount (Rs. In Lakhs): 113.6 <i>Duration:</i> 5 Years w.e.f. 06-09-2019 <i>PI/ Co-PI:</i> Solo PI</p>
<p>AWARDS & HONOURS/ DISTINCTIONS</p>	<ul style="list-style-type: none"> • Awarded with a highly prestigious Ramalingaswami Fellowship by Department of Biotechnology, Ministry of Science & Technology, Government of India on 17-05-2019. • Awarded the "Best Oral Presentation Award" at the International Conference on "Revealing a new paradigm of Biology in the 21st century: A Cellular and Molecular approach" organized by "AIB, AUUP, Noida" at Online mode during 8th - 9th April 2021. • Awarded the "Best Poster Award" at the International Conference on Innovations in Oils, Fats & Allied Products towards Sustainability & Lipids Expo-2011 organized by “Oil Technologists Association of India, Southern

	<p>Zone” at IICT, Hyderabad during 18th – 19th November 2011.</p> <ul style="list-style-type: none"> • Qualified All India level Graduate Aptitude Test for Engineers (GATE-2009 Life Sciences & GATE-2010- Biotechnology) • Most cited algal research articles entitled: “Performance evaluation of microalgae for concomitant wastewater bioremediation, CO₂ biofixation and lipid biosynthesis for biodiesel application”, published in Algal Research, 16, 216-223, 2016, authored by: M. Nayak, A. Karemora, and R. Sen.
<p>PROFESSIONAL SERVICE</p>	<p><i>Editorial Board Member</i></p> <ul style="list-style-type: none"> • International Journal of Energy and Environmental Science (IJEES) ISSN/ eISSN No.: 2578-9538 / 2578-9546 http://www.sciencepublishinggroup.com/ijeess • Open Access Journal of Waste Management & Xenobiotics (OAJWX) ISSN/ eISSN No.: 2640-2718 https://medwinpublishers.com/OAJWX/editorial-board.php <p><i>Peer Review Activities</i></p> <p>Renewable Energy – Elsevier Energy Conversion and Management – Elsevier Journal of Water Process Engineering – Elsevier Science of the Total Environment – Elsevier Journal of Environmental Management – Elsevier Environmental Research - Elsevier Regional Studies in Marine Science – Elsevier International Journal of Energy Research – Wiley Journal of Chemical Technology & Biotechnology – Wiley Journal of Applied Microbiology – Willi Biomass Conversion and Biorefinery-Springer Biotechnology for Biofuels – BioMed-central Bioremediation Journal – T&F Scientific Report - Springer Nature Frontiers in Bioengineering and Biotechnology – Frontier</p>
<p>Web contact</p>	<p>https://www.amity.edu/ https://www.amity.edu/aib/Faculty_Plant.asp http://auup.amity.edu/faculty-detail.aspx?facultyID=27593 http://auup.amity.edu/faculty_list_new.aspx?InstituteId=6 https://www.amity.edu/aib/Faculty/Resumes/Manoranjan-Nayak.pdf</p>
<p>Research opportunity in BBRL - BioRefinery & BioEnergy Research Laboratory</p>	<p><u>PhD/Project Position</u></p> <p>Positions are available for JRF, PhD and Master Projects in the area of Biomass, Biorefinery, Bioenergy, Wastewater Treatment and CO₂ sequestration. Looking for hard-working, bright, and enthusiastic postgraduate students with strong background in biotechnology, microbiology, biochemistry, or biochemical engineering. Interested candidates may drop me their resume with a cover letter at my e-mail address (mnayak@amity.edu and/or nayakimmt@gmail.com).</p> <p>Candidates with their own fellowship arrangements from funding agencies like UGC, CSIR, DBT, DST, INSPIRE etc. are encouraged to apply for PhD.</p> <p><u>Post-Doctoral Position</u></p> <p>Candidates having their own fellowships (N-PDF, DST-Young Scientist, CSIR-RA, DBT-RA, ICAR-RA, UGC Post-doc, Women-Scientist Award etc.) are always welcome to join the research group as post-Doc Fellow.</p>