

Resume: Prof. Rakesh K Trivedi

1. **Name** : Prof. (Dr) RAKESH KUMAR TRIVEDI
2. **Present post & Address** : Visiting Professor (Professor Emeritus)
Former **Professor and Head**
Department of Chemical Technology -Oil Technology
School of Chemical Technology
Harcourt Butler Technical University
Kanpur, INDIA 208002 &
Mobile: 09415044271, 9721456006
Email: rakeshtrivedi@hotmail.com, rktrivedihbti@gmail.com
3. **Date of Birth** : February 1, 1958
4. **Area of interest** : Chemical Engineering & Technology, Oil Technology,
Pollution abatement and waste management, Education
for challenged, Management education, Public relation
and placement
5. **Educational Qualification** :

Name of Degree	Year	Univ./Board	% Marks	Division
B. Tech. (Chem. Tech.)	1979	HBTI, Kanpur	75	First With Dist
M. Tech. (Chem. Tech.)	1981	HBTI, Kanpur	70	First
Ph. D. (Chem. Tech.)	1991	HBTI, Kanpur Kanpur University		
Post Graduate Diploma Ecology & Environment	1996	Indian Institute of Ecology & Environment, New Delhi		

Training and Refresher courses:

Abroad (International)

- (i) Expert Training Programme on Oil fortification **during March 17-26th 2002**, held at **Netherlands**
- (ii) Internal Auditor course on ISO 14000 during 14 – 18 August 2000, held at Toronto **Canada**
- (iii) **International Training Program on Essential Oils**, August 1997, Purdue University, West Lafayette, IN, USA.
- (iv) 2- Weeks **International Training Program in New Crops**, June 1997, Purdue University, west Lafayette, IN, USA.

- (v) Training Course on Workplace Hazardous Material Information System (WHMIS) 17 September 1996 held at University Of Guelph, **Canada**
- (vi) One week Traing program in **Principals of Environmental Assesment, Organised by United States Environmental Protection Agency** during 1-5 April 1996 held at Indian Institute of Technology, Kharagpur, India
- (vii) Certificate on Pollution Prevention Technologies during 1-2 June 1995 held at Graet Lakes Pollution Prevention Centre, **Canada**

India (National)

- (i) Faculty and Management Development Programme at STEP-HBTI, Kanpur, Feb25-29,2012
- (ii) Technical Education Quality Improvement Programme (TEQIP) National Programme on Industry Institute Interaction, July 2006, Hyderabad
- (iii) Technical Education Quality Improvement Programme (TEQIP) National Programme on E Learning , January 2006, Pantnagar
- (iv) Training Program on System Management for director of Technical Education Under Technical Education Quality Improvement Programme (TEQIP) August 2005 Banglore.
- (v) Training Program on Managing Youself, July, 2005, IRDT, Kanpur
- (vi) Training Program on implementation of Quality System Standards ISO 9000-2000, January 28-30, 2004, IRDT, Kanpur
- (vii) **Traing course on Disaster Management, March 1999 Organized by** Indian Institute of Public Administration, New Delhi
- (viii) **Traing course on Reliability and Safety in Process Industries, October 1998** at HBTI Kanpur,
- (ix) **Traing course on □ Energy conservation,**March 1998 at HBTI Kanpur,
- (x) 2- Weeks Course on **Computer Assisted Modular Instrumentation** , July 1993 at Indian Institute of Technology,Kanpur, India.
- (xi) 2- Weeks ISTE Course on **Audiovisuals Communication** , July 1993 at Indian Institute of Technology, Delhi, India.
- (xii) Three Months Training on Industrial Entrepreneurship, 1989, ITC Nilokheri, Govt. Of India, Haryana

6. Details of employment and Nature of Duties :

August 2003- June 2020

Professor, HBTI/HBTU, Kanpur: activities include overall administration of Department, teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling.

During period mentioned above also worked in different following capacities

Jan 2017- January 2020

Professor & Head, Oil Technology Deptt, School of Chemical Technology, HBTU, Kanpur: activities include overall administration of Department, teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling.

Additional administrative responsibility (Honorary) April 2010- Current
Director Science & Technology Entrepreneurship Park (STEP)- HBTI Society, Kanpur

July 2011- July 2014

Professor & Head, Oil & Paint Technology deptt HBTI, Kanpur: Activities include overall administration of Department, teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling.

May 03- July 2009

Director/ Professor, Dr. Ambedkar Institute of Technology for Handicapped.(AITH) UP, Kanpur . Activities included overall administration of the institute with all financial powers of a Head of a department of the Government of UP, and Secretary Board of Governors of the institute.

August 95- May 03

Assistant Professor, HBTI, Kanpur, **India.** Activities include teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling, and Administration.

November 96- August 97

Visiting Scientist-Associate Professor, Purdue University, West Lafayette, USA. Activities included research on Project for Surface coatings and air Pollution .

August 96 - November 96

*Visiting Scientist, University of Guelph, Ontario, **Canada.** Activities included research on the project to develop process for modification of vegetable oils for better health utilization*

July 1991 - August 96

Senior Lecturer, HBTI, Kanpur, **India.** Activities include teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling, and Administration.

December 1985 - July 1991

Lecturer , HBTI, Kanpur, India. Activities include teaching B.Tech. and M.Tech. Courses, guiding M.Tech. and Ph.D. research, Industrial Consultancy and Research, Student Counseling, and Administration.

March 1985 - November 1985

Technical and Marketing Manager M/s Punjab Paint Colour & Varnish Works, Kanpur, India. Activities included development of new oil-based binders for surface coatings, erection and commissioning of dehydrated castor oil and resin plants, and launching of decorative paint products all over the state of Uttar Pradesh.

March 1983 - Feb. 1985

Oil Technologists at HBTI, Kanpur, India in Research Scheme of Planning Research and Action Division of State Planning Institute of Government of Uttar Pradesh.. Activities included development of methodology of expression of Soybean and Sunflower seeds by expeller.

March 1982 - Feb. 1983

Technical Manager, M/s Meghdeep Chemicals Ahmedabad, Gujrat, India.:Activities included control of R & D, technical sales, and processing of castor into raw, refined, hydrogenated and dehydrated castor oils.

March 1981 - Feb. 1982

R & D Chemist-cum-Laboratory, Incharge. M/s Meghdeep Chemicals, Ahmedabad, Gujrat, India. Activities included monitoring of quality of castor seeds pressed cakes, oils and oil products, and R & D work on castor oil products.

7. **Area of Specialization: Chemical Technology:** Processing of chemicals including Oils, Oleo chemicals, Essential Oils, Functional foods, Surface coatings, Soaps & detergents, bio-fuels, Pollution abatement and waste management.

8. **Research Experience**

About 37 years research experience in the area of specialization and allied subjects.

Current Research interest and plans:

Currently working mainly in the areas namely bio-fuels, medicinal plants, and fortification of oils, supercritical fluids and environmental management. I have started work and plan to expand this in Bio-Chemical technology. The focus of research is planned in the area of natural products and nutraceuticals.

(a) **M.Tech. and Ph.D. Research Projects Supervised** : 26

(B) SPONSORED PROJECTS

Completed three research Projects :

(i) "*Supercritical extraction of oleogenons materials for purer oils and proteins*" sponsored by Ministry of Human Resource Development, **Govt. of India** .

(ii) Shastri Indo Canadian Institute-Canadian International Development Agency partnership project with collaboration of University of Guelph, Canada. The project was entitled "*Waste Management for Sustainable Development in India: Policy Planning and Administrative Dimensions*"

(iii) Shastri Indo Canadian Institute-Canadian International Development Agency partnership project with collaboration of University of Guelph, Canada. The project was entitled "*Managing Environmental Risks from Household Products*"

(iv) Vitamin A fortification of vegetable oils , **Micronutrient Initiative, Canada**

9. INDUSTRIAL EXPERIENCE

Period	Organization	Title of Project and Nature of Work	Designation
March 1985 – November 1985	M/s Punjab Paint Colour & Varnish Works, Kanpur	Development of new oil-based binders for surface coatings, erection and commissioning of dehydrated castor oil and resin plants, and launching of decorative paint products	Technical and Marketing Manager
<u>March 1982 - Feb. 1983</u>	M/s Meghdeep Chemicals Ahmedabad	Control of R & D, technical sales, and processing of castor into raw, refined, hydrogenated and dehydrated castor oils.	Technical Manager
<u>March 1981 - Feb. 1982</u>	M/s Meghdeep Chemicals, Ahmedabad	Monitoring of quality of castor seeds pressed cakes, oils and oil products, and R & D work on castor oil products.	R & D Scientist-cum-Laboratory, In charge.

10. ADMINISTRATIVE EXPERIENCE

Period	Organization	Nature of responsibility	Designation
Jan 2017-Current	HBTU, Kanpur	Administration of Oil Tech Deptt	Professor & Head
July 2011-July 2014	HBTI, Kanpur	Administration of Oil & Paint Tech Deptt	Professor & Head
April 2010-Current	STEP-HBTI	Over all Administration, including Academics	Director-(Honorary)
May 03 July 2009	AITH, Kanpur	Over all Administration	Director (Executive Head of the institute)
Nov. 2001- May 2003	HBTI, Kanpur	Placement of students	Officer on special Duty - Placement
August' 2000 to Nov. 2001	HBTI, Kanpur	Student Counseling, and Administration.	Warden West Campus Hostel I
May 1994-August 96. May 98- Nov. 98	HBTI, Kanpur	Student Counseling, and Administration.	Warden Lake view Hostel III
March 1991 to	HBTI, Kanpur	Management of all the	Officer In charge

September 1992		purchases of the institute	purchase section
August' 1988 to May 1992	HBTI, Kanpur	Student Counseling, and Administration.	Warden Lake view Hostel I & II

11. Honours and Awards :

- (i) Prof J G Kane Award of Oil Technologist's Association of India 2011
- (ii) S Husain Jaheer Award of Oil Technologist's Association of India 2001
- (iii) Merit Award - Prag Narain Memoria Award of Oil Technologist Association of India on "PUFA Hardened Fat by Interesterification" 1986.
- (iv) Certificate of Merit for contribution in college Science Improvement Programme at P.P.N. College, Kanpur 1975-76.
- (v) National Cadet Corps (N.C.C.) Senior Division 'B certificate 1976.
- (vi) Diploma in South Indian Language (TAMIL) from Education Deptt. U.P.Government.
- (vii) Editor Institute Magazine 1977-78 at HBTI, Kanpur.
- (viii) Secretary, Literary Council & Chief Editor News Bulletin, 1978-79 at HBTI, Kanpur.
- (ix) Civil Defense Training Certificate from U.P.Government.

(iii) Co-curricular and Extra-curricular : Had been the convener and advisor of
Literary Council of HBTI

- Had been the convener/co-chair/chairman of several National / International Conferences and workshops in India and abroad.
- Had been the member of the steering /organizing committee of National / International Conferences., and the Members of various committees for their successful organization.

➤ **Industry Liaisoning and Consultancy:**

I have very good liaison with the Oil processing industry and have done several industrial Consultancy assignments benefiting industry as well earning for the Institute.

I have organized the several training programs for the working professionals of industry and institutions under continuing education Programme as well as STEP programs at HBTI.

I have worked as consultant to several organizations in the area of Oils and fats, soaps and detergents. The few noteworthy are

- Haryana Co-operative Marketing Fedearition Ltd (HAFED), India
- Punjab Co-operative Marketing Fedearition Ltd (MARKFED), India
- Micronutrient Initiative, Canada
- Central Pollution Control Board, Ministry of Environment, Govt of India

12. **International Exposure and Connections:**

* I have established contacts with the international research organization as well as sponsoring agencies, which are engaged in the area of my research and activity.

* I have already worked on international assignments and have history of coming back to my country in spite of lucrative offers from abroad. :

Work experience abroad:

November 96- August 97 Visiting Scientist-Associate Professor, Purdue University, West-Lafayette, Indiana, USA.

August 96 - November 96 Visiting Scientist, University of Guelph, Ontario, Canada.

Visits for presentation of papers and collaborative research work

- (i) May 1989 (15 days) USA and Canada
- (ii) May 1995 (21 days) Canada
- (iii) Apri-May 1996 (20 Daya) USA and Canada
- (iv) December 1997 (15 Days) Canada
- (v) June 1998 (15 Days) Canada
- (vi) June 1999 (15 Days) Canada
- (vii) September 2000 (22 Days) Canada
- (viii) May- June 2001 (18 Days) Canada
- (ix) March 2002 (14 Days) Neatherlands
- (x) August 2004 (14days) Pakistan
- (xi) September 2008 (07days) Japan
- (xii) September 2019 (6 Days) Indonesia

13. **Membership of Professional Bodies:**

1. American Oil Chemists Society, U.S.A.

2. Life Member Oil Technologists Association of India.

- Elected National **President** of the Oil Technologists Association of India for the year, 2017-20

Elected National **Vice President** of the Oil Technologists Association of India for the year, 2015-17

Elected **President** of the Oil Technologists Association of India for central Zone for the year, 2009-11, 2011-2013, 2013-2015

- Elected all India **Vice President** of the Association for the year 2003-05

- Elected all India **General secretary** of the Association for the year 1999-2001 & 2001-03, 04-07, 2012-13

- Elected all India **joint General secretary** of the Association for the year 1997-1999

- Elected all India **General Treasurer** of the Association for the year 1993-1995 and 1995-97.

3. Fellow Life member Institution of Chemical Engineers (IChE) - **Elected Chairman for Institution of Chemical Engineers Kanpur regional centre, 2010,11,2013, 2017-19**
4. Life member Association of Food Scientists and Technologists, India.
5. Life member Essential Oil Association of India.
6. Life member Indian Society for Technical Education
7. Life member Indian Institute of Public Administration
8. Fellow Life member Institution of Engineers, India

14. Membership/chairmanship of academic bodies/committees other than Institute(workplace).

- I. Chief Editor of Journal “SHODH”- A Peer Reviewed , Bi-Annual- Journal of Technology, Management and Social sciences (ISSNNO. 2249-152x)
- II. Joint Editor Soap Detergents & Toiletries Review, Mumbai, India
- III. Has been Member Bureau of Indian Standards (B.I.S.) sectional committee FAD-13 and CHD:025
- IV. Chairman sectional committee ,FAD-13 and CHD:025 Bureau of Indian Standards (B.I.S.), Government of India
- V. Member Editorial Board journal of Oleo Science, Japan Oil Chemists’ Japan
- VI. has been Joint Editor Journal of Oil Technologist’s Association of India
- VII. Current Editor Journal of Lipid Science & Technology (JLST), published by OTAI
- VIII. Member Editorial Board journal of Essential Oil Bearing Materials, India
- IX. Chaired Technical sessions in National and International conferences in India abroad
- X. Expert Member in selection committees for faculty at several institutions
- XI. Expert Member /chairman in AICTE, UPTU/AKTU team for approval of institution/ Programme.
- XII. Expert member in NBA team for accreditation of Engineering Programme by AICTE.
- XIII. Chairman STC, South Asia Regional Standard Organization (SARSO) , Dhaka

15. List of Publication and Presentation (Prof R K Trivedi, HBTU, Kanpur)

a) Research Publications : 71

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| (i) Papers / Abstracts in conference proceedings | : 32, Annex A |
| (ii) Conferences attended | : 110 (Aprox.) |

b) Research publications in refereed journals Annex A

- | | |
|-------------------|------|
| i) National | : 42 |
| ii) International | : 15 |

© Book(s) written/chapter(s) contributed in book(s). :

Books

1. Trivedi, R.K, Corporate Social responsibility” (ISBN 978-93-81505-59-5), Wisdom

- Publication, New Delhi, 2017.
2. Trivedi, R.K, Saxena, T. and Dwivedi, P. (Edited). **Sustaining Management Education in India in 21st Century: Issues, Challenges and Strategies**” (ISBN 978-93-81505-59-5), Wisdom Publication, New Delhi, 2013.
 3. Trivedi, Rakesh K., ed. **Managing Environmental Risk: Challenges Facing Detergents in the 21st Century**. (ISBN 0-07-043434-4) New Delhi: Tata McGraw-Hill, 2001.
 4. Southey C., Kaushik N. and Trivedi R.K., eds. **Detergents and the Environment: The Canadian Experience and India Scenario**. (ISBN 0-07-043434-4) New Delhi: **Tata McGraw-Hill, 2001**.
 5. Awasthi S.K. and Trivedi R.K. , eds. **Industrial Waste Management and Sustainable Development**. (ISBN 81-9000970-1-6) **Wisdom Publishing House, 2001**
 6. Trivedi, Rakesh K., ed. **Proceedings of inception workshop** held during January 13-14, 1999 at HBTI Kanpur
 7. Trivedi, Rakesh K., ed. **Solvent Extraction of Vegetable oils**

Chapters in Books: included in the list of publications

Papers - (a) Published

List of Publications

1. Castor Oil based compounds in surface coating: R.K. Trivedi, Paint India, 33(2), 3(1983).
2. Lesser known Vegetable Oils for surface coatings : R.K. Trivedi and S. Chandra, Paint India, 36 (4), 40(1986).
3. Low pressure hydrogenation of Castor Oil : R.K. Trivedi and A.K. Vasishtha, Journal of American Oil Chemists Society, 65(9), 1467 (1988).
4. Heptaldehyde and undecylenic acid from castor oil : G. Das, R.K. Trivedi and A.K. Vasishtha, Journal of American Oil Chemists, Society 66(7), 938(1989).
5. Sebacic acid and 2-Octanol from Castor Oil : A.K. Vasishtha, R.K. Trivedi and G. Das, Journal of American Oil Chemists, Society, 67(5), 333(1990).
6. Deacidification of Ricebran oil by Super critical carbon Dioxide, R.K. Trivedi, P.V.S. Rao, A. Awasthi, Journal Of Oil Technologists Association of India, Vol.29, JanMarch., 8-12 (1997)
7. Effect of agitation in the hydrogenation of castor oil: Rakesh. K. Trivedi and A.K. Vasishtha . Journal of American Oil Chemists Society, 74(8), 957-962 (1997).
8. A Review on Supercritical Carbon Extraction Of Natural Products: A Awasthi and R. K. Trivedi . Chemical Engineering World Vol.XXXII No.10, October, 65-71 (1997).
9. Synthetic Detergents Challenges and Opportunities: Rakesh K. Trivedi, Soaps, Detergents & Toiletries Review, Annual 1999, April 2000, Mumbai.
10. Enzyme Base Detergent Formulations: R.K. Trivedi, Vandana Jain Journal of Oil

Technologist's Association of India, 2003

11. Eco-friendly Detergent Formulations with Lime Soap Dispersing Agents: R.K.Trivedi, Om Hari, Saurabh A Srivastava, Soaps, Detergents & Toiletry Review. February 2006
12. Studies on Methyl Ester sulfonates: C V Subrahmanyam, M Venkateswara Rao and R K Trivedi 117, Vol.40, July-sept, Journal Of Oil Technologist's Association of India, 2008
13. Improving Management Education Outcomes: Opportunities for Interventions in Indian Perspective. Rakesh K. Trivedi, Journal "Shodh" (page nos.17-24)(ISSN NO.2249- 152X), VOL.1,ISSUE1, July -2011.
14. An Empirical study on Effectiveness of SSA Programme for Development of Rural India in Book titled Agri Business and Rural Development : Issues & Challenges: Rakesh K. Trivedi), Saxena, T, pp.1-14 (ISBN- 978-93-81564-02-8), published by FMS, BHU, Varanasi (2011)
15. An Analytical Study of Performance Management System at Bharat Sanchar Nigam Limited, Kanpur: Rakesh K. Trivedi, Journal "Prastuti" (ISSN NO), VOL.1, ISSUE1, JUNE-2012.
16. Exploring Priorities for Transactional Vs Transformational Leadership in an Indian Private Sector Organization through HRD Intervention", Trivedi, R.K. , Shodh, (ISSN No.2249-152X), Vol.1, Issue 1, Dec, pp. 17-24, (2012).
17. A study on Competency Mapping & Gap Analysis: An Organizational Development Intervention", Trivedi, R.K. (2013). " Management Dynamics, (ISSN No. 0972-5067).
18. Removal Strategies of Sanguinarine Alkaloid from Argemone oil: Application for Industrial Use, Siddiqui,F .,Bajpai,M. and Trivedi, R.K.. "Shodh, (ISSN No.2249- 152X), Vol.2, Issue 2, Jan, pp.15-26, (2013)
19. Pretreatment of Lignocellulosic Wastes to Improve Ethanol Production from Different Kinds of Agro Residue, Devendra Pratap Singh and Rakesh K. Trivedi, National Geographical Journal of India, 56 (2010), 85-98, Pt.2.
20. Ethanol, An Economical & Environmentally Feasible Way of Biofuel From Cellulosic Materials: Process And Discussion, Devendra Pratap Singh and Rakesh K. Trivedi International Journal of Applied Engineering Research, ISSN: 0973-4562, Vol. 7, No.11, (2012)
21. Fermentation process using enzymatic strain enhances the bio fuel Production from lignocellulosic biomass, Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Emerging Technologies in Computational and Applied Sciences, 3(2), Dec.12- Feb.13, pp. 182-186 2013.

22. Acid And Alkaline Pretreatment of Lignocellulosic Biomass to Produce Ethanol As Biofuel, Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Chem Tech Research Coden (USA): IJCRGG, Vol.5, No.2, pp 727-734, April-June 2013. ISSN : 0974-4290.
23. Production of Biofuel from Lignocellulosic Biomass, Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Engineering Research and Technology (IJERT), Vol. 2 Issue 6, June - 2013, Page 2713-2719. ISSN: 2278-0181.
24. Effect Of Biofuel Upon Global Warming, Climate And Production Of Crops, A Case Study Of Eastern Uttar Pradesh (India), Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Engineering Research and Application (IJERA), Vol. 3, Issue 4, Jul-Aug 2013, pp.1054-1060.
25. Recycling of agricultural wastes in to biofuel production: an ecofriendly product. Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Engineering Inventions - Volume 3, Issue 3 (October 2013) PP: 60-65
26. Production of Biofuel from Algae: An Economic and Eco-Friendly Resource Devendra Pratap Singh and Rakesh K. Trivedi, International Journal of Science and Research (IJSR) - Volume 2 Issue 11, November 2013, PP: 352-357
27. Environmental, Economical and Financial Aspects of Production of Biodiesel from Algal Biomass, Devendra Pratap Singh and Rakesh K. Trivedi, The International Journal of Science & Technoledge, Vol.2: Issue.1, January 2014 pp- 32-38. ISSN 2321 – 919X
28. Biofuel from wastes an economic and environmentally feasible resource, Devendra Pratap Singh and Rakesh K. Trivedi, Energy Procedia (Science Direct), ISSN: 1876-6102, Vol. 54, 2014, page 634-641.
29. A novel approach for improvement of Oxidative stability of flaxseed oil by blending with palm oil. Kshitij Bhardwaj, Narsingh Verma, Shipra Bhardwaj ,International Journal Of Advanced Research (2015), Volume 3, Issue 11, 1399 – 1407
30. Characterization Of Functional Properties Of Protein Isolates And Protease Enzyme From Non Edible Oilseeds Cake, Kshitij Bhardwaj, RK Trivedi, Prerna Singh, Saumya Mishra, Shipra Bhardwaj. World Journal of Pharmacy and Pharmaceutical Sciences (2015). Under Solid State Fermentation. Vol 4, Issue 5, 763-777
31. Flaxseed Oil and Diabetes: A Systemic Review, Kshitij Bhardwaj, Narsingh Verma, R.K. Trivedi and Shipra Bhardwaj, J. Med. Sci., 2015, DOI:10.3923/jms.2015.
32. Significance of Ratio of Omega-3 and Omega-6 in Human Health with Special Reference to Flaxseed Oil, Kshitij Bhardwaj, Narsingh Verma R.K. Trivedi, Neha Shukla , International

33. Viscous Flow Behavior of Karanja Oil Based Bio-Lubricant Base Oil : Umesh Chandar Sharma, Sadhna Sachan and Rakesh Kumar Trivedi. Journal of Oleo Science, Vol. 67, No1, 105-111, 2018
34. Synthesis & Characterization of Biosurfactant using waste from oil processing industry as substrate by *Pseudomonas aeruginosa* (MTCC 424): Ashutosh Mishra, and Rakesh Kumar Trivedi, Rasayan Journal of Chemistry Apr.-Jun. 2019 Vol. 12 no. 2 PP 1011-1021.
35. Coconut Oil Based Low Temperature Hair Oil Formulations: S C Mishra, and R K Trivedi, TEST Engineering and Management, Jan-Feb 2020, Volume 82, 11509-513
36. S. C. Mishra, R. K. Trivedi "Coconut oil based low temperature liquid hair oil formulations with ester modification" Journal Test Engineering and Management vol. 82 page 11504-11508 January-February 2020.
37. S. C. Mishra, R. K. Trivedi "Coconut oil based liquid hair oil formulations with BUTYL Esters and ETHYL Esters modification" Journal Test Engineering and Management vol. 83 page no. 8245-8249 March-April 2020.
38. S. C. Mishra, R. K. Trivedi " Coconut oil based low temperature liquid hair oil formulation: A Review" Journal Test Engineering and Management vol. 83 page 14047-14072 March-April 2020.
39. A comparative study of biosurfactant preparation by *Pseudomonas aeruginosa*, MTCC 424 using ricebran oil & soyabean oil substrate, Ashutosh mishra and Rakesh kumar trivedi, Journal of Indian Chemical Society Vol. 9 no. 11b Nov. PP 2501-2515, 2020.
40. Optimization of process inputs for the synthesis of waste rice bran oil isolated *Pseudomonas aeruginosa* MTCC 424 biosurfactant using response surface methodology for oil recovery applications, Ashutosh Mishra, G. M. Saud, Shashi Bala Gautam, and Rakesh Kumar Trivedi, Bioresource Technology Vol. 14 June 2021
41. Biosurfactants: Characterization by *Pseudomonas aeruginosa*, Analysis techniques and application taking rhamnolipid as an example, Ashutosh Mishra, and Rakesh Kumar Trivedi International Journal of Chem. Tech. Research Vol.14 No.01, pp 087-100, 2021.
42. Vinaya Tiwari, Alok Das, Shallu Thakur & R K Trivedi (2021), Molecular characterization of blue-green algae (*Anabaena constricta*) and comparative studies of biodiesel production from other species, Indian Journal of Chemical Technology, Vol. 28, March 2021, pp. 150-162.
43. Vinaya Tiwari, Alok Das, Shallu Thakur & Rakesh Kumar Trivedi (2021), Selection of Indigenous Algal Species for Potential Biodiesel Production, Journal of Pure Applied Microbiology 15 (2): 851-863.
44. Jyoti Srivastava, Tandra Nandi, Rakesh K. Trivedi (2021) "Castor Oil-Based Nanolubricants: An Overview", Asian Journal of Chemistry, Vol. 33 No. 12 PP. 2885-2895.

List of papers in books and proceedings

1. Integrating Environment and Economy: the Case of Dairy Industry, K. Goyal, S.K. Awasthi and R.K. Trivedi. Book Waste Management for Sustainable Development in India, Tata McGraw Hill, New Delhi (1995).

2. Integrating Environment and Economy: the Case of the Tanning Industry, M. Misra, R.K. Trivedi and S.K. Awasthi. Book Waste Management for Sustainable Development in India, Tata McGraw Hill New Delhi (1995).
3. Integrating Environment and the Economy in paper Industry: Use of Low-waste Technologies, M. Misra, S.K. Awasthi and R.K. Trivedi. Book Waste management for sustainable development in India, Tata McGraw Hill, New Delhi (1995).
4. Integrating Environment and the Economy in Vegetable oil Refineries, V.Singh, R. K. Trivedi, and S. K. Awasthi. Book Waste Management for Sustainable Development in India, Tata McGraw Hill, New Delhi (1995).
5. Castor oil and its oleochemicals R.K. Trivedi a chapter in Book, Treaties on Oils, Fats and Oleochemicals Edt. O.P. Narula, Industrial Consultants, New Delhi, India (1995).
6. Management of Oil Industry Wastes: R. K. Trivedi. chapter in Book, Treaties on Fats, Fatty acids and Oleochemicals Edt. O.P. Narula, Industrial Consultants, New Delhi, India (1997).
7. Surfactant Industry - Emerging Trends: R. K. Khanna, R.K Trivedi and S. K. Awasthi, "Managing Environmental Risk: Challenges Facing Detergents In The 21st Century" Book. Edit. R.K.Trivedi, TATA McGraw-Hill Publishing Co. New Delhi.2000.
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2. Ms. Vandana Jain (Completed)
3. Mr. D. P. Singh (Completed)
4. Khitiz Bhardwaj (completed)
5. Mr. Ashutosh Mishra (Completed)
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7. Mr. Vinaya Tiwari (Ongoing)
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- Ms. Surabhi Saraswat
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