

Navjot Kaur

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D.O.B. : 03-01-1988



Research Interest: Heterogeneous catalysts for biodiesel production

CAREER OBJECTIVE

My aim is to work innovatively for the enhancement and betterment of education. I aspire to work for an institution which offers career growth and chances to learn and improve my knowledge.

ACADEMIC QUALIFICATION

Degree	Institution	Year	Percentage/CGPA
Ph.D Chemistry	Thapar University, Patiala	2015	9.27 (Course work)
<i>Thesis Title:</i> Calcium and zirconium oxide based solid catalysts for the transesterification of low quality triglycerides. Thesis supervisor: Dr.Amjad Ali			
M.Sc. Chemistry	Thapar University, Patiala	2010	8.75
B.Sc. Medical	Punjabi University, Patiala	2008	68.79
XII (Medical)	P.S.E.B. Mohali	2005	70.88
X	P.S.E.B. Mohali	2003	81.38

TEACHING EXPERIENCE

Name of the Institution	Position	From	To	Subject/Courses taught
Sri Guru Granth Sahib World University, Fatehgarh Sahib	Assistant Professor	July, 2016	Till date	Physical Chemistry, Inorganic Chemistry, M.Sc. Chemistry Laboratory courses
Sri Guru Granth Sahib World University, Fatehgarh Sahib	Assistant Professor	July, 2015	May, 2016	Physical Chemistry, Industrial Chemistry, B.Tech, B.Sc. and M.Sc. Chemistry Laboratory courses
GSSDGS Khalsa College, Patiala	Assistant Professor	February, 2015	April, 2015	Physical Chemistry, Inorganic chemistry, Organic chemistry, B.Sc. Chemistry Laboratory courses
Thapar University, Patiala	Teaching Associateship	September, 2014	December, 2014	B.Tech and M.Sc. Chemistry Laboratory courses
Thapar University, Patiala	Teaching Associateship	August, 2011	December, 2012	B.Tech and M.Sc. Chemistry Laboratory courses

ACADEMIC ACHIEVEMENTS

- Senior Research Fellow from 01.01.2013-31.07.2014 in CSIR sponsored project entitled "Zirconia supported solid catalyst for simultaneous transesterification and esterification of high free fatty acid containing triglycerides" (Sanction Letter No.: 01(2503)/11/EMR-II dated 05.05.2011).
- M.Sc. thesis entitled "Lithium supported magnesium oxide as a heterogeneous catalyst for

biodiesel production from mutton fat”.

- YASHDEV SINGH GOLD MEDAL for standing first in the college in the annual examination of B.Sc. 1st year.

RESEARCH PUBLICATIONS

- Kaur, N; Ali, A; Preparation and application of Ce/ZrO₂-TiO₂/SO₄²⁻ as solid catalyst for the esterification of fatty acids. *Renew. Energ.*, **2015**, 81, 421-431. **(I.F – 3.476)**
- Kaur, N; Ali, A; Ethanolysis of jatropha oil using molybdenum impregnated calcium oxide as solid base catalyst. *RSC Adv.*, **2015**, 5, 13285-13295. **(I.F – 3.840)**
- Kaur, N.; Ali, A.; Lithium zirconate as solid catalyst for simultaneous esterification and transesterification of low quality triglycerides. *Appl. Catal. A: Gen.*, **2015**, 489, 193-202. **(I.F – 3.942)**
- Kaur, N.; Ali, A.; One pot transesterification and esterification of waste cooking oil via ethanolysis using Sr:Zr mixed oxide as solid catalyst. *RSC Adv.*, **2014**, 4, 43671-43681. **(I.F – 3.840)**
- Kaur, N.; Ali, A.; Kinetics and reusability of Zr/CaO as heterogeneous catalyst for the ethanolysis and methanolysis of Jatropha oil, *Fuel Process. Technol.*, **2014**, 119, 173-184. **(I.F – 3.352)**
- Kaur, N.; Ali, A.; Lithium ions-supported magnesium oxide as nano-sized solid catalyst for biodiesel preparation from mutton fat. *Energ. Sourc. Part A*, **2013**, 35, 184-192. **(I.F – 0.386)**

PUBLICATIONS IN CONFERENCE PROCEEDINGS

- Kaur, N; Ali, A; Methanolysis of Jatropha oil employing Mg-Zr/CaO as heterogeneous catalyst, proceedings of conference on Exploring Basic and Applied Sciences for Next Generation Frontiers, Elsevier publishers, ISBN: 9789351073130, Chapter 49, 180-184, **2014**.
- Kaur, N; Ali, A; Sodium impregnated zirconia as a solid base catalyst for the transesterification of waste cotton seed oil, proceedings of conference on Exploring Basic and Applied Sciences for Next Generation Frontiers, Elsevier publishers, ISBN: 9789351073130, Chapter 50, 185-188, **2014**.

CONFERENCE AND WORKSHOP ATTENDED

- National Conference on “Exploring Basic and Applied Sciences for Next Generation Frontiers” held at Lovely Professional University, Phagwara during Nov. 14-15, **2014**.
- National Conference on “Innovative Molecules for Sustainable Future” held at Thapar University, Patiala during Oct. 24-26, **2013**.
- One day seminar “Basics and Applications of Instrumentation Techniques in Chemistry” held at Thapar University, Patiala, on September 18th, **2013**.
- National Conference on Preservation of Environment: Challenges before Humanity” held at Sri Guru Granth Sahib World University, Fatehgarh Sahib on 14th March, **2013 (Award for Best Poster)**.
- International Conference on “Functional Materials for sustainable energy and advanced technology” held at Thapar University, Patiala, during Feb. 13-15, **2012**.
- National Conference on “Emerging Trends in Chemistry-Biology Interface 2011” held at Kumaun University, Nainital during Nov. 03-05, **2011 (Award for Best Poster)**.
- Workshop on Intellectual Property and Innovation Management in Knowledge Era organised by NRDC at Thapar University, Patiala on September 28th, **2011**.
- National Symposium on Green Chemistry held at Thapar University during February 5-6, **2009**.

OTHERS

- Interpretation of Powder X-ray diffraction, X-ray photoelectron spectroscopy, Fourier transform-infrared spectroscopy, Field emission scanning electron microscopy, Transmission electron microscopy, Thermo-gravimetric–Differential Scanning Calorimetry, Energy dispersive X-ray

spectrometry, Surface area and Porosity, Gas chromatography-Mass spectroscopy, Fourier transform-nuclear magnetic resonance data.

- Knowledge of Origin, Sigma plot, Mestrenova, Delta etc.
- Add-on Certificate course, Add-on Diploma Course, Add-on Advanced Diploma Course in Clinical Diagnostic Technique.

PERSONAL DETAILS

Citizenship : Indian
Gender : Female
Marital Status : Unmarried
Father's Name : S. Baldev Singh Virk
Mother's Name : Gurmeet Kaur
Languages : English, Hindi, Punjabi

REFEREES

Dr.Amjad Ali

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Thapar University, Patiala.
Email: amjadali@thapar.edu
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Dr.Ranjana Prakash

Associate Professor
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