

Bio-data of Dr. Ajay Kumar



- 1. Full Name:** Dr. AJAY KUMAR
- 2. Father's Name:** Sh. Ram Mehar
- 3. Department:** Applied Sciences (Faculty of Engineering & Technology)
- 4. Current Designation:** Assistant Professor (Stage -2)
- 5. Date & Place of Birth:** 12.08.1982, Muzaffarnagar, Uttar Pradesh
- 6. Gender:** Male
- 7. Marital Status:** Married
- 8. Nationality:** Indian
- 9. Address for Correspondence:** Department of Applied Sciences, Faculty of Engineering & Technology, Gurukula Kangri (Deemed to be University), Haridwar -249404, Uttarakhand
- 10. Permanent Address:** Village: Bhandora, Post: Babri, District: Shamli-251305, Uttar Pradesh, India.
Mobile: +919927242988
E-mail: ajay.kumar@gkv.ac.in

11. Academic Qualifications

1997: High School, (Science group), U.P. Board, Allahabad

1999: Intermediate, (Science group), U.P. Board, Allahabad

2002: B. Sc (Industrial Chemistry, Chemistry & Mathematics), C.C.S. University, Meerut

2004: M. Sc (Organic Chemistry), H.N.B. Garhwal University, Garhwal

2007: Ph. D (Analytical Chemistry), Gurukula Kangri University, Haridwar

Title of Thesis: Microgram Determination of Mn(II) in Aqueous/Mixed Media Using the Periodate Oxidation of N, N-Dialkylanilines.

12. Dissertation

1999: Shakubri Straw Product Ltd, Paper Manufacturing Industry, Muradbad, Uttar Pradesh.

2001: Barnala Steel Pvt. Ltd., Steel Manufacturing Industry, Muzaffarnagar, Uttar Pradesh.

2002: Chakardhar Chemicals Pvt. Ltd., Fertilizers Manufacturing Industry, Muzaffarnagar, Uttar Pradesh.

13. Membership of Academic Bodies

1. Life membership of Indian Council of Chemists.
2. Lifetime membership of Indian Science Congress.

14. Teaching Experience: 10 Years 03 Months

15. Field of Research: Chemical Kinetics, Plant Chemistry, Essential Oils

16. RESEARCH PUBLICATIONS & ACADEMIC CONTRIBUTIONS

A. Paper Published in Journals

1. R. D. Kaushik, Rajdeep Malik and **Ajay Kumar**, Kinetics and mechanism of periodate oxidation of *o*-anisidine in acetone-water medium” J. Indian Chem. Soc., 2010, 87 (3): 317-323. **Scopus indexed, SJR = 0.233 (2010)**
2. R.D. Kaushik, Dharmendra Kumar, **Ajay Kumar** and Rajdeep malik, Spectrophotometric study of kinetics and mechanism of oxidation of *o*-ethoxyaniline by periodate ion,” Asian J. Chem., 2010, 22(3): 2155-2164. **Scopus Indexed, SJR = 0.171 (2010)**
3. R.D. Kaushik, Rajdeep malik, Manila and **Ajay Kumar**, Kinetics and mechanism of oxidation of *m*-anisidine by periodate ion., Asian J. Chem., 2010, 22(3): 2090-2098. **Scopus Indexed, SJR = 0.171 (2010)**
4. R. D. Kaushik, Dharmendra Kumar, Anuj Kumar and **Ajay Kumar**, Manganese (II) catalysed oxidation of 2, 4-xylidine by periodate- A kinetic mechanistic study. J. Indian Chem. Soc., 2010, 87 (7): 811-816. **Scopus Indexed, SJR = 0.233 (2010)**
5. Rajneesh D. Kaushik, **Ajay Kumar**, Tarun Kumar and Prabha Singh, Manganese (II) catalysed periodate oxidation of *p*-toluidine- A kinetic-mechanistic study. Reaction Kinetics, Mechanism and Catalysis, 2010, 101 (1): 13-23. **Scopus Indexed, IF = 2.081 (2020)**
6. **Ajay Kumar*** Chemical composition of essential oil isolated from the rhizomes of *Kaempferia galanga L.*, Int J Pharm Bio Sci, 2014, 5(1): 225-231. **Scopus, SNIP = 0.731, SJR = 0.288 (2014)**
7. **Ajay Kumar***, Abha Shukla, GC/MS analysis of essential oil isolated from the roots of *Cymbopogon winterianus* Jowitt., J. Chem. & Cheml. Sci., 2014, 4 (1): 35-41.
8. **Ajay Kumar***, Physico-chemical and natural products investigations of essential oil from the rhizomes of *Kaempferia galanga L.*, Der Chemica Sinica, 2014, 5(2): 91-94.

9. **Ajay Kumar***, Chemical characterization of essential oil from the rhizomes of *Kaempferia rotunda* L. by GC/MS technique., Int J Pharm Bio Sci, 2014, 5(4): 458-462. **Scopus indexed, SNIP = 0.731, SJR = 0.288 (2014)**
10. **Ajay Kumar***, Sanjay Kumar and Navneet, Antimicrobial activity and phytochemical analysis of *Kaempferia rotunda* L. rhizomes., Der Pharmacia Lettre, 2015, 7 (9): 389-395. **Scopus indexed, SJR = 0.193 (2015)**
11. **Ajay Kumar***, Navneet, Shiv Shanker Gautam, Volatile constituents of *Curcuma caesia* Roxb. rhizome from North India. Natl. Acad. Sci. Lett., 2020. <https://doi.org/10.1007/s40009-020-00926-y>
Scopus indexed, Springer, IF = 0.788 (2020)
12. **Ajay Kumar***, Phytochemistry, pharmacological activities and uses of traditional medicinal plant *Kaempferia galanga* L.–An overview. Journal of Ethnopharmacology 253 (2020) 112667. <https://doi.org/10.1016/j.jep.2020.112667>
Scopus indexed, Science Direct, Elsevier, IF = 4.36 (2020)

B. Paper presented in Conferences, Seminars & Symposia

INTERNATIONAL CONFERENCE

1. Kinetic and mechanism of Mn(II) catalysed periodate oxidation of p-chloroaniline in acetone-water medium. (93rd Indian Science Congress, Hyderabad, January 3-7, 2006).
2. New method for kinetic-spectrometric estimation of Mn(II) in nanograms based upon the periodate oxidation of aniline. (94th Indian Science Congress, Chidambaram, January 3-7, 2007).
3. Ancient *Ayurvedic* herbs mentioned in *Atharva Veda*. (World-Veda-Conference, Veda and Arts Collage, Gurukula Kangri University, Haridwar, December 20-22, 2009).
4. Studies on manganese (II) catalyzed oxidation of N-ethylaniline by periodates. (97th Indian Science Congress, Karla University, Trivanantpuram, Karla, January 3- 7, 2010).
5. Microgram estimation of N, N-dimethyl-p-toluidine in water-A new kinetic spectrometric method. (International Conference on Green Technology and Green Environment (GTGE-2010), Chuodhary Charn Singh University, Meerut, January 26-28, 2010).
6. Applications of periodate oxidation of 2,4-xylidine for nanogram determination of manganese (II). (98th Indian Science Congress, SRM University, Chennai, January 3 to 7, 2011).

7. Automotive emissions & their harmful effects on human health. (World Congress for Man and Nature “Global Climate Change & Biodiversity Conservation” Department of Zoology & Environmental Science, Gurukula Kangri University, Haridwar, November 11-13, 2011).
8. Microgram determination of o-anisidine base on its manganese (II) catalyzed oxidation by periodate ion. (99th Indian Science Congress, KIIT University, Bhubaneswar, January 3 to 7, 2012).
9. Determination of 2, 3-dimethylaniline in water sample-An application of periodate oxidation. (Green Technologies for Environmental Rehabilitation, Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar, February 11-13, 2012).

NATIONAL CONFERENCE, SEMINARS, SYMPOSIA

1. Spectrophotometric determination of nanogram amount of Mn(II) in water. (27th Annual Conference of Indian Council of Chemists, Gurukula Kangri University, Haridwar, December 26-28, 2008).
2. Anti-microbial study of *Acorus Calames* rhizome essential oil. (27th Annual Conference of Indian Council of Chemists, Gurukula Kangri University, Haridwar, December 26-28, 2008).
3. Kinetics and mechanism of manganese (II) catalyzed periodate oxidation of 2, 6-xylidine. (National conference on Resent trends in Chemical Research, Meerut Collage, Meerut, September 4-6, 2010)
4. Role of nutrition supplements in our life. (4th National Conference on Modern Trends and Directions of Physical Education and Sports, Department of Physical Education and Sports, Gurukula Kangri University, Haridwar, December 9-11, 2010).
5. Catalytic periodate oxidation of n-ethylaniline in acetone water medium. (National Conference on Innovations and Applications in Engineering and Applied Sciences, Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar, November 9-10, 2011).
6. A study on climate change-impact on natural resources and environment. (National Conference on Impact of Climate Change on Natural Resources and Environment Sponsored by UGC, Chinmay Degree College, BHEL, Haridwar, October, 13-14, 2012).
7. A study on phytotherapeutic potential of medicinally useful essential oil from the leaves of indigenous plant *Citronella*. (National Conference on Progress in Electronics & Allied Sciences, Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar, November 3-4, 2012).

8. Phytochemical, antibacterial and medicinal evaluation of the leaves of *Cymbopogon winterianus* Jowitt. (ETES-2013, Faculty of Engineering & Technology, Gurukula Kangri University, Haridwar, November 9-10, 2013).
9. Role of stimulants in sports. (National conference on Present Innovative Approaches & Paradigm in Physical Education, Department of Physical Education and Sports, Gurukula Kangri University, Haridwar, August 29, 2014).
10. Yoga therapy for the management of asthma and bronchitis ailments. (National Seminar on “Yogic Management and Life Style Disorders” Organized by Department of Human Consciousness & Yogic Science Faculty of Medical Science & Health, Gurukula Kangri University, Haridwar scheduled from 30-31 March, 2015).

17. Book published

Published a book on” *Rashatriya Seva me Gurukula Vishwavidalaya ka Yogdaan*” Winsar Publishing Co., Dehradun (2015). ISBN: 978-81-86844-80-9

18. Book Chapters published

Two Book Chapters: Chapter No. 6 “*Carboxylic acids* & Chapter No. 7 “*Functional derivatives of monocarboxylic acids*” in the **Book of Organic Chemistry–II**, Uttarakhand Open University, Nainital, (2018).

19. Orientation/Refresher Course attended

1. Orientation course, UGC-ASC, July 23-August 18, 2012, Rani Durgawati University, Jabalpur.
2. Special winter school, UGC-ASC, November 01-December 21, 2013, Pt. Ravi Sanker Shukla University, Raipur.
3. Refresher course on “*Refresher course in Basic Science*” December 16-28, 2019, Rani Durgawati University, Jabalpur.

20. Short Term Course/Faculty Development Programme/Workshop attended

1. Faculty Development Programme, May 17-28, 2011 organized by Dev Sanskriti Viswavidhyalya, Haridwar.
2. Workshop on *Personality Development and Leadership*, December 20, 2012, organized by the NSS Cell, Department of Youth Welfare, Govt. of Uttarakhand, and held at Saraswati Vidya Mandir Inter College, Sec-2, BHEL, Haridwar.

3. Short term course on “*Nuclear Science and Nuclear Power Generation*” March 14-18, 2016, organized by the Department of Applied Sciences, NITTTR, Bhopal.
4. Participated in a short term course on “*Effective Teaching Skills*” during January 03-07, 2019 at HRDC Pondicherry University, Pondicherry.
5. Participated in faculty development programme (online) on “*An Approach for Technical Skill Enhancement (FDPTSE-2020)*” during May 05-10, 2020 organized by Internal Quality Assurance Cell (IQAC), at Toshniwal Arts, Commerce and Science College, Dist. Hingoli, Maharashtra.
6. Participated in a short term course on “*Online Education & Teaching Methodologies*” during August 07-10, 2020 organized by Swayam Committee, at Gurukula Kangri Vishwavidyalaya University, Haridwar.

22. Extra-Curricular activity

1. Observer for conducting the *Central Teacher Eligibility Test-2012*, Nov. 18, 2012, Holy Ganges Public School, Jwalapur, Haridwar.
2. National Service Scheme, *Programme Officer* from 01.04.2012 to 01.05.2015, Faculty of Engineering & Technology, Gurukula Kangri University Haridwar, Uttarakhand.
3. Observer for conducting *EDCIL Exam-2020* for the appointment of subordinate staff in CBSE, Dec. 29-30, 2020 at Roorkee Centre, Haridwar.

Date: 7/13/2021

(Dr. AJAY KUMAR)