



Dr Ashaq Hussain

**Associate Professor of Chemistry,
Govt. Gandhi Memorial Science College, Jammu**

Dr Ashaq Hussain, Associate Professor of Chemistry at Govt. Gandhi Memorial Science College, Jammu, is an eminent academic and science communicator with over 24 years of teaching experience. Holding a Ph.D. in Chemistry, his expertise lies in Inorganic and Environmental Chemistry, with significant contributions to research on microwave-assisted synthesis and antimicrobial activities of metal complexes.

He has authored 13 books, published 18 research papers, and written over 600 articles in newspapers and magazines, making science accessible to the wider public. Beyond academia, he has been actively involved in teacher training and student workshops since 2012, in collaboration with the Royal Society

of Chemistry, UK, and the NCSTC, DST, Government of India.

As a Resource Person in numerous educational programs, Dr. Hussain has inspired thousands of students and teachers, particularly in underrepresented regions of Jammu and Kashmir. His contributions have earned him multiple recognitions, including the Best Educationist Award by District Administration Kishtwar, honours from the Rotary Club of Jammu, and an Outstanding Contribution Award in Science Popularization from ARTBSE, Nagpur.

Through his vision of "*My Bharat, My Responsibility*", Dr. Hussain continues to champion sustainability, youth empowerment, and citizen-driven nation-building, making him a true catalyst for positive change in both academia and society.

Dr Ashaq Hussain: Nurturing Scientific Temper and Sustainable Futures

India's march towards a *Viksit Bharat* (Developed India) is powered not only by economic growth and technological advancement but also by the quiet, tireless contributions of individuals who dedicate their lives to nurturing knowledge, promoting education, and inspiring future generations.

Among such torchbearers stands Dr Ashaq Hussain, Associate Professor of Chemistry at Govt. Gandhi Memorial Science College, Jammu. His journey, rooted in the serene landscapes of Jammu and Kashmir, reflects an extraordinary blend of scholarship, service, and societal engagement. Through his teaching, research, authorship, and public outreach, Dr Hussain has become a significant figure in advancing science education and sustainability awareness, particularly in regions where opportunities are often limited.

Early Life and Academic Journey

Born on **3rd February 1977**, Dr Hussain grew up in the picturesque yet educationally underserved region of Doda in Jammu and Kashmir. His curiosity for science, coupled with a deep respect for knowledge as a transformative force, guided him towards the discipline of chemistry. His academic pursuits culminated in a **Ph.D. in Chemistry**, with specialization in **Inorganic and Environmental Chemistry**. His research interests, particularly in **microwave-assisted synthesis** and the **antimicrobial activities of metal complexes**, reflect both scientific rigor and social relevance.

Over the years, he cultivated an academic career that extends well beyond traditional classroom teaching, blending pedagogy with mentorship, community engagement, and leadership. His teaching portfolio spans more than **24 years**, including **18 years at the undergraduate level and six years at the secondary level**, ensuring that his impact touches multiple generations of learners.

Contributions to Teaching and Research

Dr Hussain's teaching philosophy is rooted in simplicity, clarity, and real-world application. He consistently strives to bridge the gap between complex chemical concepts and everyday life, making science relatable to students across disciplines. His classes emphasize not just factual knowledge but also critical thinking and curiosity — qualities essential for building a scientific temper.

On the research front, his published work includes **18 research papers** in national and international journals, covering themes such as novel methods of synthesis and the biological activities of chemical compounds. His research integrates modern techniques with practical applications, underlining his commitment to both advancing scientific frontiers and addressing societal needs.

His authorship of **13 books** on chemistry and science education further reflects his dedication to knowledge dissemination. These books serve as valuable resources for students, educators, and researchers, offering both academic insights and pedagogical clarity. Beyond academic publications, his extraordinary output of **over 600 articles in newspapers and magazines** demonstrates his zeal for science popularization. Through these writings, he reaches audiences far beyond academic circles, helping ordinary citizens appreciate the role of science in daily life.

Championing Science Popularization and Outreach

One of Dr Hussain's most significant contributions lies in the domain of science outreach. Recognizing that science cannot remain confined to laboratories and lecture halls, he has worked tirelessly to bring it into classrooms, communities, and public spaces.

Since 2012, he has been associated with various **teacher training and student workshops**, often organized in collaboration with prestigious bodies like the **Royal Society of Chemistry, UK** and the **National Council for Science & Technology Communication (NCSTC), Department of Science & Technology, Government of India**. These workshops — conducted across multiple regions of Jammu and Kashmir — have empowered teachers with new methods of experiential learning and inspired thousands of students to view science as an exciting and empowering discipline.

As a **Resource Person** in numerous national and regional educational initiatives, he has played a vital role in hands-on chemistry workshops, conferences, and training sessions. His ability to communicate complex topics in accessible language makes him an effective mentor, motivating young minds to pursue careers in science.

Leadership and Administrative Roles

Dr Hussain's contributions extend to academic administration as well. He has served as **Associate Dean of Student Welfare at Cluster University of Jammu**, where he worked to ensure that educational growth was complemented by student engagement, welfare, and extracurricular development. His leadership philosophy emphasizes inclusivity, participation, and holistic growth — principles that mirror the broader vision of a *Viksit Bharat*.

His experience in academic leadership, coupled with his grassroots outreach, places him at the intersection of policy, pedagogy, and practice — enabling him to contribute meaningfully to educational reform and innovation.

Recognitions and Awards

Dr Hussain's work has not gone unnoticed. His contributions have been honoured by several institutions and organizations.

- **Best Educationist Award** by the District Administration of Kishtwar, recognizing his tireless efforts in advancing education.
- Recognition from the **Rotary Club of Jammu**, reflecting his societal impact and service orientation.
- **Outstanding Contribution Award in Science Popularization and Education** by ARTBSE, Nagpur, a testament to his ability to make science engaging and accessible to wider communities.

These accolades, while affirming his personal achievements, also highlight the value of sustained grassroots engagement in shaping a scientific society.

Vision for a Sustainable Bharat

Dr Hussain's intellectual and professional pursuits are deeply intertwined with his vision of a sustainable future for India. His essay, "*My Bharat, My Responsibility: My Vision for a Sustainable Bharat*" (2025), outlines a holistic framework for nation-building

anchored in environmental stewardship, citizen participation, and educational empowerment.

In his vision, sustainability is not a peripheral concern but a **moral and civic responsibility**. Drawing upon India's civilizational ethos and ecological wisdom, he emphasizes the urgent need to balance modernization with environmental preservation. He advocates for integrating **traditional ecological knowledge** with modern science, promoting renewable energy, sustainable agriculture, and inclusive education.

Central to his philosophy is the belief that every citizen has a role to play in nation-building: "*My Bharat, My Responsibility*" is not a slogan; it is a call to action.

He champions grassroots citizen engagement, youth empowerment, women's education, and holistic development as pillars of sustainable growth. His strategy of **Avoid, Minimize, Generate (AMG)** for resource management exemplifies his pragmatic approach to sustainability — encouraging citizens to avoid unnecessary consumption, minimize usage through efficiency, and generate clean energy alternatives.

Impact on Society and Community

Dr Hussain's impact extends beyond academic and scientific contributions. By organizing workshops in remote and underserved areas of Jammu and Kashmir, he has inspired countless students who may otherwise have had limited exposure to science. His writings in newspapers and magazines foster scientific awareness among the general public, encouraging informed discussions on pressing issues such as climate change, environmental degradation, and public health.

His efforts have helped bridge the gap between **science and society**, ensuring that knowledge does not remain confined to elite circles but becomes a tool of empowerment for ordinary citizens. He stands as an example of how educators can serve as catalysts for social transformation by combining intellectual pursuit with civic responsibility.

Inspiring the Next Generation

As India journeys towards *Amrit Kaal* and envisions becoming a developed nation by 2047, educators like Dr. Hussain play a pivotal role. His emphasis on **curiosity-driven education, youth participation, and sustainability consciousness** resonates strongly with the aspirations of a new India.

By mentoring young students and teachers, authoring books, contributing to policy-level discussions, and engaging in grassroots activism, he demonstrates the multifaceted role of a 21st-century academic. His life's work exemplifies how dedication, vision, and perseverance can ripple outward to inspire thousands and, ultimately, shape the trajectory of a nation.

In his words, "*Every Indian — from policymakers to farmers, students to entrepreneurs — has a crucial role.*" By living this principle, he exemplifies the spirit of responsibility, service, and innovation that will guide India towards a brighter, more sustainable future.