



Kattesh V. Katti, M.Sc.Ed, PhD, DSC, FRSC, FNAI
<http://katteshkatti.com/>

Globally recognized as the **‘Father of Green Nanotechnology’**, Professor Kattesh V. Katti, MSc Ed, PhD, DSc, FRSC, FNAI, Curators’ Professor of Radiology, Director, Institute of Green Nanotechnology, within the Medical School, University of Missouri, Columbia, USA—is internationally renowned as a leader in the interconnecting fields of—chemistry, radiopharmaceutical sciences, nanotechnology/green nanotechnology and nanomedicine—for biomedical applications, specifically for molecular imaging and therapy of living subjects. Dr. Katti is considered to be a pioneer in the field of Nano-Ayurvedic Medicine—a new medical modality which he has discovered by the application of Green Nanotechnology to Ayurvedic-Holistic Medicine. The US Patents and Trade Marks office has approved the use of ‘Nano-Ayurvedic Medicine’ name in the products of this new medical modality. Dr. Katti’s inventions of several nanomedicine products are already in the market for use in treating cancers and infections. For the ground breaking discoveries in medicine, Dr. Katti has been awarded a number of international awards and citations, which include: **2019** WHO’s WHO Marquis “Albert Nelson Marquis Lifetime Achievement Award; **2018** Professor of the European Union in Green Nanotechnology;”; **2017** Distinguished Alumni Award from the University of Missouri for his life time achievements; Winner of the **2016** ‘Person of the Year in Science’ award. Dr. Katti was selected for this coveted award for his pioneering research in Green Nanotechnology with applications to Nanomedicine. Dr. Katti has won the International Hevesy Medal Award (**2015**)—A Global award for excellence in Nuclear Sciences and Nuclear Medicine—considered equivalent to a **Nobel Prize in Nuclear Sciences**; Elected to the fellowship of the National Academy of Inventors (**2015**) recognizing the discovery of ‘Katti Peptides’—a group of peptides used in biomedical sciences and nanomedicine research. In recognitions of his ground breaking discoveries of radioactive gold nanoparticles in cancer therapy with implications in theranostics and plethora of original research in SPECT imaging, Dr. Katti has been recognized as One of the ‘25 Most Influential Scientists In Molecular Imaging in the World’ by RT Image. Dr. Katti has received the ‘Father of Green Nanotechnology’ citation by the Nobel Prize Winner Norman Borlaug, and has been bestowed with the Gauss Professorship—Hall of Fame—from the Gottingen Academy of Sciences. *Dr. Katti is the first immigrant American to win the ‘Outstanding Missourian Award’—the highest civilian award from the Governor of the State of Missouri; former awardees of this highly coveted award include Walter Elias “Walt” Disney, Mark Twain, and Walter Cronkite...* Dr. Katti has won the ‘Outstanding Scientists Fellows’ award and inducted as a Fellow of the St Louis Academy of Science—one of the oldest scientific academies of the world and many more. In 2013, Dr. Katti was elected as a fellow of the American Association for the Advancement of Science with a citation “for distinguished contributions encompassing nanoscale chemistry, particularly for ground breaking discoveries enabling application of nanotechnology concepts for biomedical applications”. His unprecedented discoveries of the production of tumor specific gold nanoparticles through 100% green processes have been cited as the Editor’s choice in Nature, Future Medicine, in Science (AAAS), in Popular Science, and by the Discovery Channel.

Dr. Katti is credited with discovering and commercializing over a dozen cancer therapy and antibiotics drugs through Green Nanotechnology and Nanomedicine approaches.

Dr. Katti’s researches in Cancer Treatment through Nanomedicine and Green Nanotechnology have been highlighted in scientific/medical programs of the Voice of America (**January 2017**):
<http://learningenglish.voanews.com/a/researchers-testing-new-liver-cancer-treatment/3666029.html>;
and the British Broadcasting Corporation (BBC, London).

Dr. Katti is the chief editor, editorial board member or member of advisory boards of a number internationally reputed peer reviewed scientific journals.

Dr. Katti has published over 300 publications, reviews, and book chapters and is the principle inventor on over 150 inventions and over 50 patents. He has delivered over 500 Inaugural/Plenary/Invited lectures in 25 countries.

NATIONAL AND INTERNATIONAL PRIZES, AWARDS, HONORS AND CITATIONS:

Professor Kattesh V. Katti has won numerous scientific awards of excellence from the United States, Germany, Australia, Brazil, India, South Africa, France and many countries in recognition for his original contributions in Biological Chemistry, Bioconjugate Chemistry, Radiopharmaceutical Sciences, Biomaterials, Nanomedicine, Green Nanotechnology and allied biomedical fields of global health relevance:

2019: Dr. Katti has been selected to receive the 2019 WHO's WHO Marquis "Albert Nelson Marquis Lifetime Achievement Award". Former awardees include Apples CEO TIM Cook among other high profile dignitaries.

2017: Alumni distinguished award from the University of Missouri for his life time achievements in research productivity.

2016: Named 'Person of the Year in Science': Over 75 million readership base of Vijayavani globally selected Dr. Katti for this coveted award for his pioneering research to connect India's 5000 year old traditional holistic medicine (Ayurveda) with scientifically sound nanomedicine through his ingenious green nanotechnology research. This work has created a new field of holistic medicine which Dr. Katti refers to as nano-ayurvedic medicine: <http://medicine.missouri.edu/news/20160121-katti-indias-person-of-the-year.php>

2016: RMIT Foundation Award: RMIT University, Melbourne, Australia, has selected Dr. Katti for the 2016 internationally prestigious RMIT Foundation Award. Every year, RMIT community makes hundreds of nominations from across the globe for this highly competitive award. Dr. Katti's pioneering research in Green Nanotechnology, Nano-Ayurvedic Medicine and Nano Medicine has culminated into this and many international awards.

2015: Elected as a fellow of the National Academy of Inventors (Induction Ceremony held at Caltech on March 20, 2015)

National Academy of Inventor's Citation: "Kattesh V. Katti Ph.D., DSc., is the Curators' Professor of Radiology, Physics and Senior Research Scientist at the Nuclear Reactor at the University of Missouri. He is Director of the University of Missouri's Institute of Green Nanotechnology and Center for Green Nanotechnology at the University of the Western Cape, South Africa. His pioneering discoveries in bioconjugate chemistry ('**Katti Peptides**'), radiopharmaceuticals, nanomedicine and green nanotechnology are used in the development of cancer diagnostic and therapeutic agents, osteoarthritis therapy, nuclear waste remediation, and in alternate energy production. He is recognized as the 'Father of Green Nanotechnology' and has received the MU Presidential Economic Development Award, Outstanding Missourian Award and the Gauss Professorship from the Gottingen Academy of Sciences, Germany. He holds numerous US and foreign patents licensed to domestic and international companies. He has published over 170 peer-reviewed articles and 10 book chapters. Katti is an elected fellow of the AAAS, and fellow of the Academy of Science, St. Louis":

<http://academyofinventors.org/conference/docs/fellows-program-2014.pdf>

2015: Winner of the 2015 Hevesy Medal Award. The George Hevesy Medal Award is the premier international award of excellence in radioanalytical and nuclear chemistry. It is named after George de HEVESY (1885- 1966) who received the Nobel Prize for Chemistry in 1943 for his work on the use of isotopes as tracers in the study of chemical processes. The George Hevesy Medal, considered to be equivalent to a Nobel

Prize in Nuclear Sciences, is awarded to an individual in recognition of excellence through outstanding, sustained career achievements in the fields of pure as well as applied nuclear and radiochemistry, in particular applications to nuclear analytical chemistry.

Dr. Katti is the 38th recipient of this internationally prestigious Medal—regarded as the highest honor in Nuclear Sciences which was instituted in 1968: <http://www.icaa-mtaa.org/ICAA%20wiki/Hevesy%20Medal%20Awards%20since%201968.aspx>

2015: Annual Oration and Award by the Society for Cancer Research and Communication (SCRAC).

2015: Distinguished Professor under the Brazilian Scientific Mobility Program "Ciências sem Fronteiras" of the Brazilian Government, the National Council for Scientific and Technological Development of the Ministry of Science, Technology and Innovation (CNPq/MCTI).

2015: INGRAMS Selected Kattesh V Katti as one of “50 Missourians You Should Know” --MISSOURI’S GREATEST NATURAL RESOURCES ARE THE PEOPLE LIVING HERE—Some have overcome personal challenges with the hand dealt them early in life, or after career setbacks, and they have prospered in spite of the burden. Some have taken the bounty they inherited at birth, and found ways to turn it into additional value—not only for themselves and their families, but for the betterment of the 6 million other souls who call the Show-Me State their home. They hail from private companies and publicly owned companies, from non-profit groups and universities, and from organizations they’ve founded after their careers, because they weren’t done giving back to a land that they believe has given them so much. From every corner of the state, they show us that the best of what Missouri has to offer is not solely confined to the C-suites of Fortune 500 firms in the major metropolitan areas, but also can be found in tiny burbs, in college towns, in the thriving suburbs and in the vast rural stretches that encompass river lowlands, national forests, and productive farmlands. If there is one thing that the 50 Missourians You Should Know teach us each year, it’s that there is no one stereotypical Missourian. And for that, we should all be grateful; for full details see: <http://www.ingrams.com/article/50-missourians-you-should-know-2/>

2014: Sam Higginbottom Institute of Agriculture Technology and Sciences (SHIATS)—One of India’s 100-year old premier Universities has established an Institute entitled: ‘**Kattesh Katti Institute of Green Nanotechnology and Agri Nanotechnology**’:
http://en.wikipedia.org/wiki/Sam_Higginbottom_Institute_of_Agriculture,_Technology_and_Sciences

2013: RMIT Foundation Award from RMIT University, Australia.

2013: **A Genius In Science Citation by Corporate India**— <http://www.corporateindia.biz/people.html>

2013: **Selected as one of the Seven Best Nanomedicine Scientists in the world by HemOnc Today**—One of the highly reputed journal of hematology and oncology in the world.

2013: Selected by the United Nation’s **International Atomic Energy Agency (IAEA), Vienna, Austria**, as one of the five subject experts, globally, for consultation on the development of radioactive nanomaterials for imaging and therapy (three year term)

2012: **Elected as a Fellow of the American Association for the Advancement of Science (AAAS).**

2012: Dr. Katti was bestowed with the Doctor of Science (DSC) award from the Sam Higginbottom Institute of Agriculture, Technology and Sciences (SHIATS).

2011: **Dr. Katti was inducted as a ‘Fellow of The Academy of Science’, St Louis.** St. Louis Academy of Science is the one of the most prestigious and oldest science Academies of the world, established in 1856. To date this academy has inducted fewer than 200 fellows; Nobel Prize winner William Knowles is the former recipient of this coveted award.

2011: **Received University of Missouri System President’s Economic Development Award (3/9/11),**

http://www.umsystem.edu/ums/news/news_releases/system_faculty_students_receive_presidents_awards

Citation:

The Economic Development Award is presented to a faculty member with demonstrated success in directly contributing to the economic development of the state: Katti, curators' professor of radiology and physics at the University of Missouri-Columbia, is the principal inventor of 25 patents and 30 invention disclosures, and has obtained \$15 million in external funding and gifts as part of his work in the fields of chemistry, physics, radiopharmaceuticals, materials science, green nanotechnology and nanomedicine. He received the Outstanding Missourian Award by the Missouri House of Representatives in 2008 for his exceptional achievements in the fields of science, technology and education, including his work in developing gold nanoparticles through green nanotechnology that can detect prostate, breast and other forms of cancer.

2011: TOP 10 DISCOVERIES OF 2010: Dr. Katti's discovery of the production of biocompatible gold nanoparticles using phytochemicals in cinnamon has been judged to be one of the 'TOP 10 DISCOVERIES' of 2010: <http://www.bioresearchonline.com/article.mvc/MU-Scientists-Find-Cinnamon-Can-Replace-0001>

Father of Green Nanotechnology Citation (2007): Nobel Laureate Norman Borlaug has referred Dr. Katti as the 'Father of Green Nanotechnology' commending his pioneering role in inventing Green Nanotechnological Processes:

<http://web.missouri.edu/~kattik/katti/Links/Index/PlanetEarth.pdf>;

<http://phys.org/news/2010-11-cinnamon-chemicals-nanoparticles.html>

DSC Honor 2009: Dr. Kattesh V. Katti, Professor of Radiology and Physics, senior research scientist, MURR, was bestowed with the highly coveted Doctor of Science (D. Sc.) Honoris Causa in recognition of his contributions to nanoscience, nanomedicine, green nanotechnology and its applications to medical and environmental research during the 59th Annual Convocation of Karnataka University, India, held on January, 21, 2009.

<http://www.nanoscienceworks.org/articles/dr-kattesh-v-katti-receives-honorary-doctorate-from-karnatak-u>

One of 25 Most Influential Scientists In Molecular Imaging in the World: On September 2008: Dr. Katti, was recognized by *rt Image* magazine as one of the 25 most influential people in molecular imaging in the world for his discovery of the production of biocompatible gold nanoparticles through 'Green Nanotechnology'. Dr. Katti for the first time demonstrated that by submersing gold salts in water and then adding soybeans, gold nanoparticles were generated which are non toxic for applications in molecular imaging and therapy of cancer and other diseases. Former awardees include: Elias Zerhouni, Former Director of National Institutes of Health (2003); Henry N. Wagner Jr., recognized as the Father of Nuclear Medicine (2004); Henry D. Royal, Peter S. Conti, past presidents of the Society of Nuclear Medicine; and Barry B. Goldberg, pioneer of ultrasound (2007); http://www.radiologysearch.net/news/Most-influential-rt-image_vol-21_no-36.pdf

Outstanding Missourian Award: March 2008: Dr. Katti has been bestowed with the 'Outstanding Missourian Award' by the Missouri House of Representatives on March 4 2008. Presenting this award, House Speaker, Rod Jetton and House Representative Ed Rob praised Dr. Katti for his pioneering research and ground breaking discoveries spanning the areas of cancer diagnostics/therapy and Nanomedicine. Taken from the award literature:

<http://www.house.mo.gov/billtracking/bills081/hlrbillspdf/1068C.01.PDF>

"The Missourian Award is an acknowledgement of the most accomplished citizen of the state of Missouri and the Nation (<http://missourianaward.org/>). **Former awardees include: Former US President and an all-time great statesman: Harry S. Truman, and Walt Disney**

To be selected, one must be born in the state of Missouri, or under exceptional circumstances, a person may qualify for exceptional achievements in the fields of science, technology and education or by having spent at least fifteen years of his or her life in the state. Nominees must have made an outstanding contribution to his/her state or nation in one of the following fields of endeavor: civics, science, business, arts or politics.

Highest Honor from the University of Missouri: Dr. Katti's internationally acclaimed, ground breaking discoveries as well as his research and scholarship contributions in nanoscience and nanomedicine were recognized by the Curators of the University of Missouri by bestowing him with the 'Curators Professorship' award effective January 1, 2009.

Endowed Professorship: On March 20 2008, Dr. Katti was awarded an endowed Professorship entitled 'Margaret Proctor Mulligan Professor in Medical Research' with citation: "Katti is internationally known for developing gold nanoparticles that can detect breast cancer and other forms of cancer, potentially much earlier than current imaging methods."

2007 Outstanding St. Louis Scientist Fellows Award: Dr. Katti was awarded the coveted 2007 Outstanding St. Louis Scientist Fellows Award by the Academy of Science of St. Louis which is the most prestigious and oldest science Academies of the world. Dr. Katti was inducted into the prestigious academy as a 'Fellow' on April 24 2007. The Academy's literature called it "a rare feat to be distinguished in all chemistry, physics, nanoscience and radiochemistry—all of these fields simultaneously" and praised Katti's discoveries in the development of gold and silver nanoparticles for applications in nanomedicine.

Gauss Professorship Award from Goettingen Academy of Sciences, Germany: Dr. Katti has been awarded the 2006 Gauss Professorship Award from the Academy of Sciences, Gottingen, Germany. He is the fourth US scientist to receive this highly prestigious international award:

<http://rcp.missouri.edu/articles/katti-gaussaward.html>

President's Citation: Dr. Katti's Nanomedicine research has been cited by the President of India Hon Abdul J. Kalam in his Inaugural Speech at the Global Nanoscience Initiatives on March 16, 2008 in New Delhi, India:

http://www.bose.res.in/~roby/conference/president_iconsato6.pdf

Awarded the Distinguished Visiting Professorship from the University of Pune, India (2006).

Included in 2005 Academic Keys Who's Who in Medical Sciences Education (WWMSE)

Fellow of the Royal Society of Chemistry, London, Chem, FRSC, 1995.

Alexander von Humboldt Award from Germany: Alexander von Humboldt Scholar, University of Göttingen, FRG, 1985-1987.

Research Fellow, Department of Atomic Energy, India, 1979-1984.

Merit Fellowship from the National Council of Educational Research and Training, New Delhi, India, 1978-1980.