

AVS Recognition for Excellence in Leadership Presented to Federico Rosei

The AVS Membership Committee is recognizing Federico Rosei, INRS Centre for Energy, Materials and Telecommunications, for Excellence in Leadership. The AVS seeks to recognize individuals who not only excel in science and/or engineering, but who also, through mentoring, have enhanced the careers of future generations who might not otherwise have considered or had access to opportunities in science, engineering, and technology. Their leadership in the effort to develop fully the world's human resources is critical to the best scientific and engineering progress. Recipients of this honor will have their profile displayed on the AVS Website, featured in this Newsletter and will receive a certificate of recognition. [Click here for eligibility & nominations criteria.](#)



Q: Describe a typical day in your life.

A: I am one of the few lucky human beings who loves their job. Consequently, I try to spend (lots of) time working almost every day. My work is essentially my hobby; in other words, I am paid to do my hobby, so why would I spend time doing anything else? Of course my day also includes other basic human activities as well as spending time with friends, relatives, and my cats.

Q: What are your leisurely interests and activities?

A: As indicated in my response to the first question, I spend most of my time working, since it is my favorite activity. Nevertheless, I also enjoy reading and in general terms I love to write (not just scientific writing, but writing in general). I also like to walk, especially with company. Last but not least, I enjoy cooking.

Q: Choose one word you feel explains you best.

A: Persistent.

Q: What do you feel you are best known for?

A: My passion for my work, particularly for training young scientists and helping them reach their potential.

Q: What is your favorite part of your job?

A: Training students, who will become the next generation of scientists. Giving opportunities to young scientists and helping them achieve their goals and reach their true potential.

Q: Is there a quote you live by or that inspires you, if so what is it?

A: Yes, absolutely: "... But, how do we inspire our team members to be better than they think they can be? How do we inspire ourselves to greatness, when nothing else will do?"

[Quote attributed to the late N. Mandela in the movie "Invictus"]. A similar quote in sports, offered by a coach, would be: "I want you to know that the athlete you think you are is no match for the one you really are"

Q: Did you have a mentor?

A: I am extremely lucky because I have benefited from the wisdom and support of many mentors. My father showed me, by example, how far drive and motivation can go. He was instrumental in the conception and realization of Elettra, Italy's third generation synchrotron, literally erected on a "green field" in the early 1990s, at the time when the only other third generation synchrotron in the world was being built in Berkeley. He has been tremendously supportive of my choices and career and has boosted my enthusiasm countless times with words of wisdom and praise. Concurrently my mother conveyed her passion for teaching and convinced me of the importance of outreach, of explaining my work to others.

A few special words are reserved in alphabetical order for: Flemming Besenbacher (University of Aarhus), Mohamed Chaker (INRS), Fabrizio Galluzzi, Tudor W. Johnston (INRS), John C. Polanyi (University of Toronto), and Ashok Vijn (IREQ). The tiny glimpses I caught into the structure and properties of materials at the nanoscale I owe to these gentlemen, who encouraged me, supported me

and made me believe in myself, showing me how I could reach new heights. In other words, they were my giants, and generously allowed me to stand on their shoulders.

Flemming Besenbacher was my post-doctoral mentor and has supported me in my pursuits well beyond my relatively brief tenure in his group. He is dynamic, energetic, positive and hardworking and has been a true role model for me throughout the years.

Mohamed (whose universally known nickname is "Le Grand Chef") was the director who hired me at INRS, giving me the opportunity to start my independent career at a time when my CV was so thin, nobody else would dare look at it. But Le Grand Chef has a talent recognition gene, saw potential in me and decided to gamble. Over the years he has also been a stimulating and generous collaborator. He is the older brother I never had.

My uncle, the late professor Fabrizio Galluzzi (1945-1999), acted as an exceptional source of inspiration and guidance throughout my studies and at the earliest stages of my scientific career. Besides being a gifted scientist and excellent teacher, he was one of the kindest men I have ever known. His lively spirit, kindness and memory live on.

Tudor provided timely encouragement and criticism of my work and taught me the art of emphasizing clarity and of the importance of writing for the non-specialist. He was always extremely generous with his time and I cannot overstate my gratitude for all the discussions we had over the years, sometimes late into the night.

John kindly showed interest in my work ever since I arrived in Canada and has been since then a tremendous source of inspiration and encouragement. He taught me, by example, the importance of focusing on one's interests and of minimizing distractions. He embodies a rare combination of scientific excellence and gentlemanly conduct.

Besides being a true multidisciplinary scientist of the highest caliber, Ashok has many other merits, among which I should emphasize: the enthusiasm to support younger colleagues (not just me!), the raw and sometimes harsh honesty in reminding us of our shortcomings and the ability to make me laugh at myself. Besides his advice and mentoring, he and his wife have become close friends.

Q: Have you always wanted to be a member? What motivated you to join?

A: I was aware of this Society because it is relevant to a big part of my research activities. About two years ago a colleague from a neighboring university decided to create a new regional chapter in Quebec and invited me to join, and I did.

Q: Do you belong to any other organizations?

A: APS (Fellow), Royal Society of Canada (Fellow), European Academy of Sciences (Fellow), AAAS (Fellow), SPIE (Fellow), IEEE (Senior Member) etc.

Q: What has been your paramount experience with AVS?

A: I am ashamed to admit that I have never attended an AVS meeting. This recognition however makes me want to become more involved with the AVS, for example by organizing symposia.

Q: What is the next big step in your career you plan on tackling?

A: Having established the UNESCO Chair in Materials and Technologies for Energy Conversion, Saving and Storage (MATECSS) in 2014, it is now time to extend this concept to the other two grand challenges of modern society, environment and health. This is an ambitious long term project that is likely to keep me busy for the better part of my career.

Q: If you could leave one piece of advice for our future generations, whether it is science related or not, what would it be?

A: Invest in education and science and give opportunities to young people so that they can reach their true potential and help to make the world become a better place for everyone.