



**Department of Chemistry,
University of Oxford**
Inorganic Chemistry Laboratory,
South Parks Road, Oxford, OX1 3QR
United Kingdom
Tel/Fax: (+44) 01865 275406
E-mail: john.mcgrady@chem.ox.ac.uk
URL: <https://www.chem.ox.ac.uk>

September 18, 2024

Assoc. Prof. Martin Kubala,
Dean of Faculty of Science, Palacký University Olomouc,
17. listopadu 12, 779 00 Olomouc,
Czech Republic

Dear Professor Kubala,

Letter of recommendation for Associate Professor Radovan Herchel

It is my great pleasure to write a reference in support of Professor Radovan Herchel's application for promotion to the position of Full Professor. I have only met Rado in person once, at a meeting in 2016, but nevertheless I feel that I have gained an appreciation of his scientific integrity over the many years that we have interacted. Our link came about through a colleague, Professor Raphael Raptis of Florida International University, who has an interest in the synthesis of large clusters of magnetic transition metal ions. My own work is focussed on the theoretical analysis of such clusters, while Rado's expertise lies in the measurement and interpretation of their magnetic properties. Between us, we have collaborated on seven papers, beginning over a decade ago. Five of these are devoted to the properties of Cu_6 , Fe_3 , Fe_4 and Fe_8 clusters, and the work on Fe_4 is a paper that I am particular proud of - it has accumulated 58 citations over the years since publication. The magnetic properties of these clusters are extremely challenging to interpret, particular the iron-based materials with large local moments, and the problem is compounded when mixed-valence comes into play. It is fair to say that we would not have been able to make any sense of our data without Rado's insightful analysis. I also called on Rado's expertise in a different context when we met challenges in interpreting the magnetism of some redox non-innocent Fe-bipy complexes, work we did in collaboration with my colleague in Oxford, Professor Jose Goicoechea. Through the course of all these projects, I came to rely heavily on Rado's deep insight into magnetic phenomena, and his very adept manipulation of spin Hamiltonians. With the larger clusters (Fe_8), the sheer dimensions of the matrices involved become challenging from a computational perspective, and here Rado was very creative in designing smaller models that captured the essential physics and chemistry of the problem. I have collaborated with many physicists, but relatively few have the chemical insight that Rado displayed throughout these projects. The characteristics that I have most admired are his careful attention to detail and his openness to new ideas. He was always willing to engage with our

suggestions (even when they proved to be somewhat far-fetched!), and he has a real gift for explaining the outcomes of complex mathematical models. In short, I value him highly as a colleague and trust his results without reservation.

My collaborative work with Rado was published some time ago now (almost 15 years), at a time when he has a Professor Assistant at Olomouc. Since then, he has risen through the ranks with incredible speed, and has been Head of the Department of Inorganic Chemistry since 2018. It is truly impressive to rise to such a position of responsibility at a relatively early stage of his career, and I take this as a clear indication of the trust that colleagues place in him. It is certainly consistent with my own impression of him as an impressive and highly efficient colleague. He has continued to publish well throughout his career, and has now authored 175 peer-reviewed publications, with a most impressive *h*-index of 34. He is consistently publishing 10 or more papers per year, and his annual citations have risen steadily to their current level of approximately 300 per year. Perhaps an even better measure of his ability is the range and quality of people that he collaborates with - Rado is very much in demand across the world for his skilful interpretation of magnetism, and is building a reputation as an internationally leading scientist.

In summary, I have come to value Radovan Herchel's scientific judgement and integrity very highly. He has been a pleasure to work with over a number of years. I think his CV is very impressive for someone still at a relatively early career stage, and he would certainly be competitive for a comparable post at my own institution and other UK Universities where I have worked. His application, therefore, has my strongest support. Please do not hesitate to contact me if you need

clarification on any of the points that I have raised above.

Yours sincerely,

Professor John McGrady
Head of Inorganic Chemistry,
University of Oxford