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Patras, 15 March 2023

To whom it may concern

Dear EPDIC committee members,

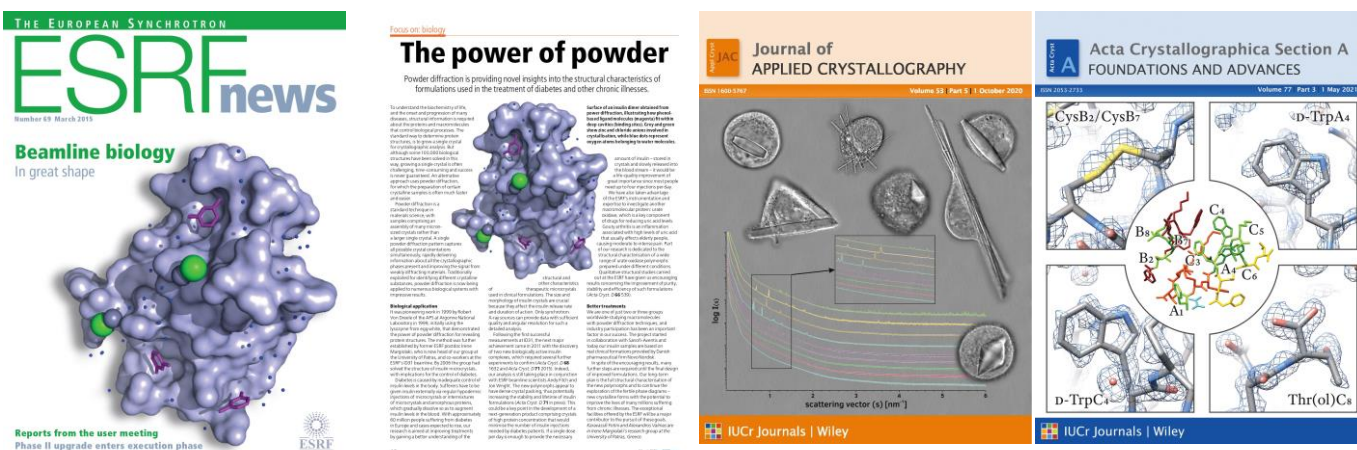
I am very pleased to recommend Dr. Alexandros Valmas for the EPDIC Young Scientist Award. Alexandros is a biologist and his area of interest and expertise is in Structural characterization of proteins mainly via X-ray Powder Diffraction (XRPD) methods. He holds a PhD in Structural biology, part of which was supported by a national scholarship ("ELIDEK/H.F.R.I" scholar upon "[1st Call for H.F.R.I. Scholarships to PhD Candidates](#)", Department of Biology, UPAT) and an MSc in the same scientific domain (both at the Department of Biology, University of Patras, [UPAT](#), Greece). The research for his MSc and PhD studies has been conducted under my supervision at the [Biochemistry, Structural Biology and X-ray Crystallography](#) lab at UPAT, Greece.

During the period 2011- present, he has conducted several experiments and diffraction data collections in a number of large scale facilities and institutes ([ESRF](#), [SLS](#), [BESSY II](#), [AFMB](#), [Malvern Panalytical](#), [Novo Nordisk](#)). He has attended various national and international conferences and schools related to X-ray crystallography (EPDIC-13, EPDIC-14, FEBS, IUCr-2017, Erice-2020) and was an invited speaker at several meetings (COST, EMBO, EPDIC-15). During EPDIC-15, he was co-author of the poster entitled as "Structural determination of Cocksackievirus B3 protease 3C via XRPD", which received the «Young Scientist Best Poster» award. He has very actively participated in the organization of 6 crystallographic workshops and conferences as these are listed in his detailed CV. In this letter, I provide the following as indicative meetings: 1. International Workshop: [Fundamentals of Crystallography](#), April 2013, UPAT. 2. International Workshop: [Powder & Electron Crystallography](#), July 2013. 3. 9th International Conference of the [Hellenic Crystallographic Association \(HeCrA\)](#) (October 2018). He is a member of [HeCrA](#), as well as core member of the HeCrA-Young Researchers Association.

He is a co-author of 20 scientific publications and reviews related to the development and synergistic use of XRPD methods for structural biology. Specifically, during his MSc and PhD studies he has played a major role in the further development of XRPD methods for characterizing peptide and protein structures associated with pharmaceutical interest (Indicative articles: [1](#), [2](#), [3](#), [4](#), [5](#), [6](#)). For this purpose, periodic visits to the ESRF were performed as well as a 3- month internship at the high resolution powder diffraction beamline (ID22). In addition, he has worked on the development of Electron Diffraction methods for the structural characterization of nanocrystalline materials (invited review article: [1](#)). To date, his work has been part of 5 protein structural models derived mainly from XRPD data, 4 of which are available in the Protein Data Bank ([6VC1](#), [6GNQ](#), [6TC2](#), [6Z1S](#)) and one ([7QAC](#)) will be available in April 2023. His significant contribution to the macromolecular powder diffraction research, is also manifested by two invited press releases and two cover articles in JAC and Acta Cryst. A:

1. Karavassili F., Valmas A., Margiolaki I., "The Power Of Powder", [ESRFnews Number 69, Cover & p.18](#), March, 2015.
2. Malvern-PANalytical [X'Press article](#) 2/2016.
3. "Rapid screening of in cellulose grown protein crystals via a small-angle X-ray scattering/X-ray powder diffraction synergistic approach." Journal of Applied Crystallography 53, 1169-1180 (2020) & [Cover article](#), J. M. Lahey-Rudolph, R. Schonherr, C. Michael Jeffries, C. E. Blanchet, J. Boger, A. S. Ferreira Ramos, W. M. Riekehr, D. P. Triandafillidis, A. Valmas, I. Margiolaki, D. Svergun and L. Redecke* ([article available online](#)) & [Scientific Commentary by T. Bergfors & S. Mayumdar](#).
4. "New perspectives in macromolecular powder diffraction using single photon counting strip detectors: High resolution structure of the pharmaceutical peptide, Octreotide." Acta Cryst. A77, 186-195 (2021) & [Cover article](#), M. Spiliopoulou, F. Karavassili, D. Triandafillidis, A. Valmas, C. Kosinas, K. Barlos, K. K. Barlos, M. Morin , M. L. Reinle-Schmitt, F. Gozzo* and I. Margiolaki* ([article available online](#)) & [Scientific Highlights of the Paul Scherrer Institute \(PSI-Switzerland\)](#).

Below are scientific results related to macromolecular powder diffraction that Dr. Valmas had major contribution and were presented as cover articles.



His scientific ability, dedication and alternative thinking, were detrimental to getting the most out of each project and his collaborative spirit made working with him a practical and enjoyable experience. He is always challenging himself to learn new things and to conquer new areas in his studies. His challenge to cover an exploratory and multidisciplinary path, somehow by itself testifies his independent thinking and innovative approach to science. His endeavour is to extend current experimental practices and views in structural biology for drug innovation via the implementation of complementary techniques to single crystal diffraction and cryo-electron microscopy focusing on XRPD methods. For the aforementioned reasons, I would like to nominate Dr. Valmas without hesitation for the EPDIC Young Scientist Award. Should you have any questions please feel free to contact me.

Sincerely yours
Irene Margiolaki