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Presentation of the Mineralogical Society of America Award for 1989 to Michael A. Carpenter

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It is a pleasure and honor to introduce Michael Allan Carpenter, this year's recipient of the Mineralogical Society of America award. Not only is Michael an esteemed colleague but a good friend. He was brought up and schooled in England, but has some melodies of Scotland and Africa in his blood. Educated at Cambridge (B.A., M.A., Ph.D. 1978, all with distinction), he is there still as a lecturer in Mineral Physics in the Department of Earth Sciences. We have known him here as a research scientist at Harvard with Charlie Burnham and later at Arizona State with me. Switzerland and the USSR have also played host to him, and he has traveled extensively. His honors include several student prizes at Cambridge, a full fellowship in Magdalene College, and a Nuffield Foundation fellowship. His duties include associate editorships for the American Mineralogist and the European Journal of Mineralogy, service on the Council of the British Mineralogical Society, and patient and perceptive reviews of many of his colleagues' papers and proposals. Indeed, willing and caring service to his human and scientific community are a cornerstone of Michael's character.

Michael's first papers (1978–1982) dealt with pyroxenes, and the theme of order-disorder and conditional exsolution was already strong, as was the expert use of electron microscopy. Desmond McConnell sent him to Arizona in 1982 to see if calorimetry could help unravel ordering in cordierite. Armed with enough well-characterized samples but not enough warm-weather clothes, Michael arrived in the land of cacti and calorimeters. I believe he enjoyed the cacti. I know he coaxed thermochemical symphonies from the ill-tempered calorimeters. He returned for an encore with plagioclases, and feldspars have consumed him ever since. He has his calorimetrist's license and now flies solo in Cambridge.

The hallmark of Michael Carpenter's science is clarity, taking complex materials and formidable-looking theories and making physical sense out of them. He ties together structure, thermodynamics, and the kinetics and mechanisms of order-disorder in minerals. He is the spokesman and interpreter of the Landau-theory formalism to the ordinary mineralogist. His lectures are beautiful.

On the personal side, I remember many pleasant times—stomping through the brush in Arizona, a crisp fall day sightseeing in Chicago, a fragrant lavender garden in Norfolk. His wife, Abby Fowden, is a successful animal physiologist in Cambridge, and their son, Rory, already sees symmetry in his toys. As a mineral physicist and as a human being, Michael Allan Carpenter deserves the highest honors, and it is a joy to present him to you for the 1989 MSA Award.

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