About the Author

Ron Lenk received his first patent, for SCUBA gear utilizing electrolysis of water, while in high school. He graduated from M.I.T. in 1980 with a degree in physics, and did graduate work in theoretical physics at Boston University.

He began his career in power electronics designing electronic ballasts for fluorescent lighting. After several years of this, he worked at a military contractor designing conventional low-power converters for avionics.

Mr. Lenk's next position was "a real love affair" as principal engineer at Space Systems/Loral. He helped design the power system for the International Space Station, for which he holds the key patents, as well as other satellite power converters. This was the time in which he devised the idea of average-current-mode control of converters. He also spent several years doing simulations of the Space Station power system using SABER; the simulations involved as many as 5000 components, and revealed a previously unrecognized potential system instability despite the stability of the individual converters comprising the system. He also did experimental and theoretical work on solar cell characterization and ionospheric plasma interactions with spacecraft power systems.

Mr. Lenk spent two years in telecom power and now heads the applications department at Fairchild Semiconductor's power IC division. Mr. Lenk holds numerous patents and publishes regularly on the subject of digital control of power supplies, in which he is recognized as one of the world's experts. He is on the advisory board of PCIM magazine, the leading magazine for power designers, and is currently the recording secretary for the Santa Clara Valley chapter of the IEEE Power Electronics Society (PELS).

Mr. Lenk has spent several years writing software, including a fully automated Windows system for design of magnetics. He is also chief software engineer for *X-Plain!* software from Optimized Engineering. His hobbies include a life-long fascination with exact solutions of classical general relativity.