Meet the eBeamers

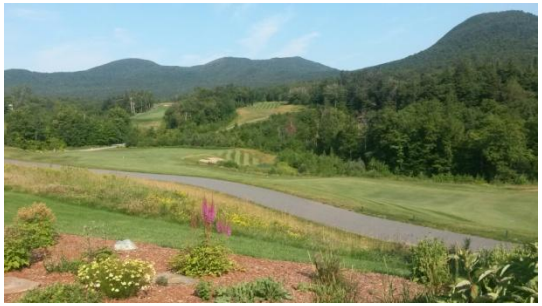
Tom has spent 29 years working on eBeam technologies in IBM's mask shop in Burlington, Vermont. In his early years, he worked with Hans Pfeiffer's eBeam group and over the course of his career, he has developed eBeam resist and dry etch processes for generations of mask writers:

- 10keV Mebes writers, 50 keV IBM Hontas mask writers, 50 keV JEOL mask writers, and 50 keV NuFlare mask writers
- 2014 SPIE Photomask conference paper in conjunction with IBM Research, Shin-Etsu and Toppan to develop a new and improved negative tone eBeam resist for use with 50 keV mask writers, which has since been commercialized

Vermont has been home for Tom and his family since 1985. Small towns, a sense of community and easy access to outdoor activities have made it a great place for Tom to raise a family and keep a healthy work/life balance.

- Tom is pictured to the left enjoying his hobby as an avid bass fisherman.
- Growing up near New York City led to Tom becoming a strong Yankees baseball fan.
- Part of work/life balance is a game of golf on some of the beautiful courses like the Jay Peak Resort Course below.

Tom Faure



Tom gives back to the industry through papers, presentations to groups like the eBeam Initiative and leadership roles at BACUS and PMJ.

- Member of the BACUS Steering Committee for about 8 years
- Photomask Japan Program Committee member for 10 years
- "I believe it is important for mask makers to continue to have open technical forums for sharing their latest technical progress and to discuss the most severe technical and business challenges."

Tom is passionate about the criticality of eBeam technology, the future of new multi-beam mask writing technology , and supporting science and engineering education in the US.

- Continuing to work on improving eBeam resist materials for use with single-beam and the new multi-beam mask writers
- Makes it a priority to mentor younger engineers to try and insure they are successful
- Next time you see Tom, ask him: "Is the semiconductor and photomask industry doing enough to continue to advance eBeam technology to meet the needs of future chip manufacturing?"