

H. Res. 1310

In the House of Representatives, U. S.,

May 4, 2010.

Whereas the invention of the laser was one of the groundbreaking scientific achievements of the 20th century;

Whereas in 1953, Charles H. Townes, along with graduate students James Gordon and Herbert Zeiger produced the first master device, which was a precursor to the laser that relied on microwave radiation instead of visible or infrared radiation;

Whereas concurrent to Charles H. Townes' activities, Nikolay Basov and Aleksandr Prokhorov of the Soviet Union independently produced a maser with significant technical advances which allowed continuous output;

Whereas Charles H. Townes, Nikolay Basov, and Aleksandr Prokhorov shared the 1964 Nobel Prize in Physics for their “fundamental work in the field of quantum electronics”, which led to the construction of masers, and subsequently lasers;

Whereas in 1960, Theodore H. Maiman constructed the first functioning laser at Hughes Research Laboratories in Malibu, California, and the laser was first operated on May 16, 1960;

Whereas Theodore H. Maiman was the recipient of the 1983/1984 Wolf Prize in Physics for his realization of the first operating laser;

Whereas since being created in 1960, lasers have become an integral and essential part of our daily lives. Lasers can be found in a wide range of applications including in compact disc players, laser printers, barcode scanners, digital video devices (DVDs), industrial welders, and surgical apparatus, amongst others;

Whereas total global sales of lasers in 2010 is expected to top 5.9 billion dollars;

Whereas innovations flowing from basic research such as the laser have made America into the world leader in technology development;

Whereas continued support of scientific research programs is indispensable to maintaining America's position as the global leader in technology and innovation; and

Whereas LaserFest is a year-long celebration of the 50th anniversary intended to bring public awareness to the story of the laser and scientific achievement generally, and was founded by the following partners: the Optical Society of America, the American Physical Society, the International Society for Optical Engineering, and IEEE: Now, therefore, be it

Resolved, That the House of Representatives—

(1) recognizes the 50th anniversary of the laser;

and

(2) recognizes the need for continued support of scientific research to maintain America's future competitiveness.

Attest:

Clerk.