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Pressemitteilung

Laser Zentrum Hannover e.V.
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Buntes aus der Wissenschaft, Schule und Wissenschaft
Maschinenbau, Physik / Astronomie, Werkstoffwissenschaften
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The LZH at the IdeenExpo 2013 – „Light for your Future“

From August 24th to September 1st, 2013, the IdeenExpo (Expo of Ideas) in Hannover will whisk young people into the worlds of natural sciences and technology. The Laser Zentrum Hannover e.V. (LZH) is among the exhibitors, with interesting hands-on experiments about lasers, under the motto „LIGHT FOR YOUR FUTURE“.

For the fourth time, the IdeenExpo will turn the fairgrounds in Hannover into the “largest classroom in the world”. Working under the motto of “Your ideas can make a change”, 550 hand-on experiments around natural sciences and technology will tickle the senses for nine days. In this year, there will be six colored “idea paths” that are spun like a web over the fairgrounds connecting and complementing the different idea paths. The LZH is on the red “material – design – products” path, and will be showing the versatility of the tool laser. At stand MDP-06, young people will be able try out 4 interesting hands-on experiments using laser technology.

Laser on Air
Sending signals using light is state of the art, and modern communications use optical technology. On the way from sender to receiver, telephone calls and e-mails are transformed into signals moving at the speed of light. Test whether music can be sent by light at the LZH stand. Is it possible to connect music from an MP3 player to loudspeakers without using wiring? Different light sources can be used, which can be guided directly to a receiver, or via mirror reflection. But how does the music actually reach the loudspeaker?

„Guess how far“
Try measuring something longer than 2 meters, if your measuring tape or stick is shorter! What are the alternatives to using a measuring stick end to end to end? Guessing isn’t very exact! Exact measurements over long distances are possible using a laser rangefinder by just reading the answer from the display. At the LZH stand, you can explore the technology behind this 40 meter long “measuring stick”, and find out just how exact your guessing is!

Components out of thin air
3-D printers are quite the rage, even if they are usually viewed as technical toys. However, this technology actually has a very promising future. The 3-D printer at the LZH stand was built by school pupils, and there are hardly limits to what it can do, since it uses open-source hardware and software, and last not least due to the know-how of the LZH scientists who work with industrial additive manufacturing. Watch the 3-D printer in action and let yourself be surprised.

Laser goes LEGO® - Brand new LEGO® Robot transforms into a laser station
What can’t be done with the new Mindstorms EV3-Roboter from LEGO®? Our scientists made a model of a laser processing station with LEGO®, and had fun in doing so. If they had had more parts and more time, who knows what they would have done? The robot has access to many tools, and the potential for many new developments is just around the corner. Even though professionals use the software LabVIEW™, it is easy to program.

If you want to have fun learning about new technologies and about what the future has in hold, don't forget to visit the LZH scientists at stand MDP-06 at the Ideen Expo!

The LZH thinks it is important to give young people insights into the fascinating world of laser technology. The Laser Zentrum Hannover e.V. in the science park in Hannover/Marienwerder offers young people the chance to gather experience with, and information on laser technology. The LZH offers practical courses for pupils in which they accompany a scientist working with laser technology, a "volunteer scientific year", or apprenticeships or practical studies in different thematic areas of the institute. More information can be found at the LZH stand at the IdeenExpo in Hannover.

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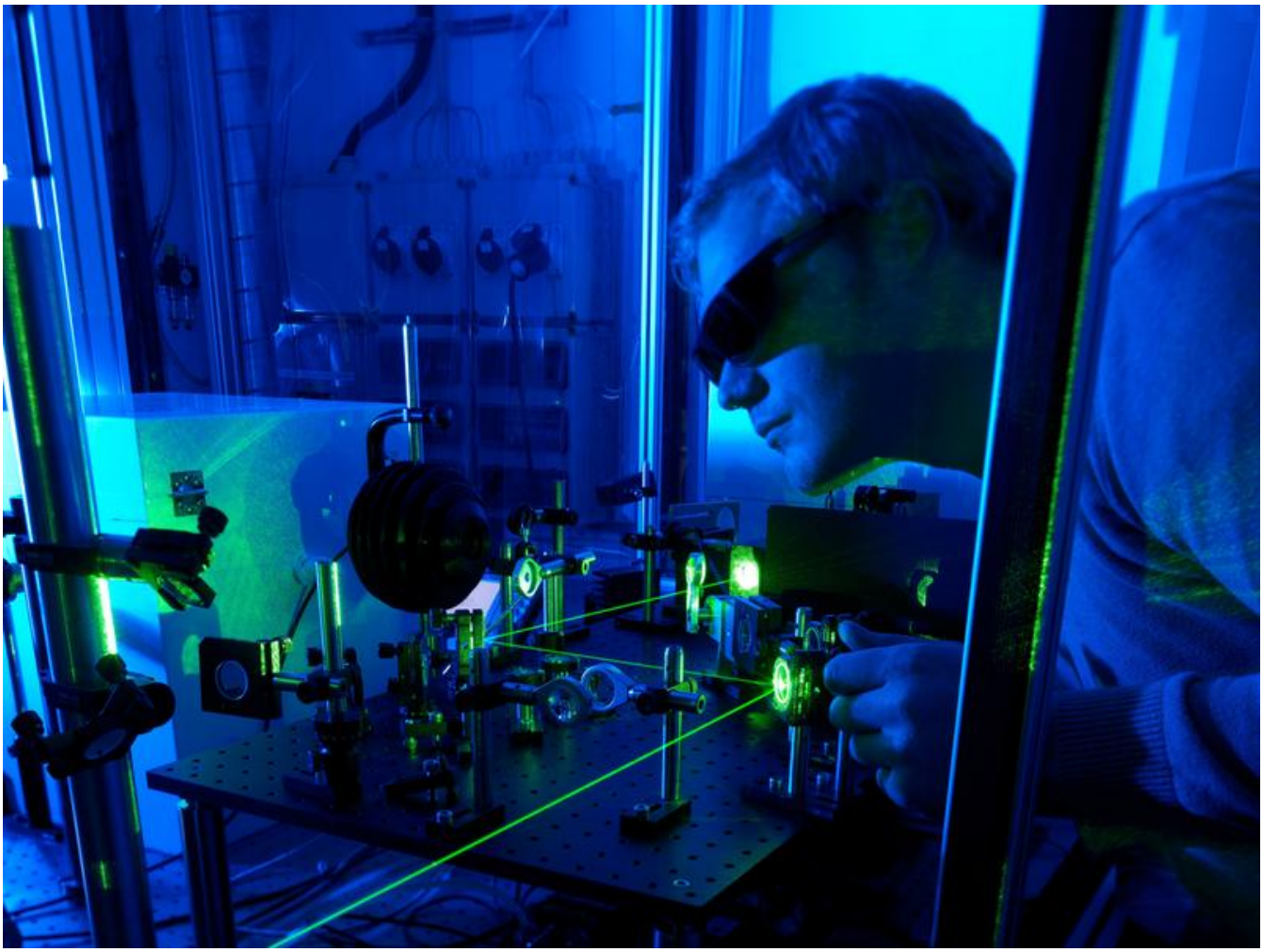
You can find the LZH press releases with a WORD-download and when possible illustrations at www.lzh.de under "publications/press releases"

The IdeenExpo 2013 Logo



Four interesting hands-on experiments are waiting at the LZH stand MDP-06 at the IdeenExpo