

# 2016

## INNOVATION AWARD LASER TECHNOLOGY

### **Innovation Award Laser Technology 2016**

awarded by  
the Arbeitskreis Lasertechnik AKL e.V.  
and the European Laser Institute ELI

### **Closing date for applications**

No later than January 15, 2016  
(time of receipt of application which must be submitted by uploading  
to the website [www.innovation-award-laser.org](http://www.innovation-award-laser.org))

### **Information**

[www.innovation-award-laser.org](http://www.innovation-award-laser.org)

### **Contact**

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Status: May 2015



# INNOVATION AWARD LASER TECHNOLOGY

## 1. Information about the Awarding Institutions

### **Arbeitskreis Lasertechnik AKL e.V.**

Arbeitskreis Lasertechnik AKL e.V. is a registered non-profit association formed in 1990 by a group of companies and private individuals aiming to pool their experience and conduct joint public-relations activities in order to spread the use of laser technology in industry and promote the sharing of scientific ideas. The »Innovation Award Laser Technology« aims to reward excellent achievements in applied research and outstanding innovation in the field of laser technology and to shine a spotlight on their authors.

In 2015, 137 laser experts and enthusiasts were signed up as active members of the AKL network. The association's activities include disseminating information on innovations in laser technology, organizing conferences and seminars, compiling educational material dealing with laser technology, stimulating the interest of future young scientists, and providing advice to industry and research scientists on questions relating to laser technology. More information: [www.akl-ev.de](http://www.akl-ev.de)

### **European Laser Institute ELI e.V.**

Optical technology is taking an increasing hold on all domains of industry and science. Europe already possesses a strong position in this field by virtue of its numerous experts and excellent research and development facilities. Nevertheless, it has been realized that there is an urgent need to link the existing sources of know-how and expertise, and to enhance the performance of joint research activities. Consequently, the European Laser Institute (ELI) has created an efficient platform bringing together the necessary competence and knowledge on optical technologies. By promoting technology transfer within Europe, ELI aims to enhance the international lead of European industry and research in the field of laser technology and photonics. By working in close collaboration with existing national and international organizations, the ELI network of industrial and academic research institutions helps to influence R&D policy on a national and European level. More information: [www.europeanlaserinstitute.org](http://www.europeanlaserinstitute.org)

## 2. Innovation Award Laser Technology

### **2.1. Objectives**

The Innovation Award Laser Technology is a European research prize awarded at 2-yearly intervals by the association Arbeitskreis Lasertechnik e.V. and the European Laser Institute ELI. The award can be conferred on an individual researcher or on an entire project group, whose exceptional skills and dedicated work have led to an outstanding innovation in the field of laser technology. The scientific and technological projects in question must center on the use of laser light in materials processing and the methods of producing such light, and must furthermore be of demonstrable commercial value to industry. The media exposure associated with the award offers an opportunity to promote a wider public interest in the technological advances of laser technology.

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## 2.2. Technological fields of interest

It takes a great deal of experience and specialized knowledge, not to mention considerable dedication on the part of the authors, to successfully carry a technical development project through from the basic research stage to industrial or commercial maturity. The aim of the Innovation Award Laser Technology is to focus a spotlight on the interface between applied scientific research and industrial practice.

The range of possible fields extends from the development of new laser beam sources and systems for use in laser materials processing to the qualification of innovative laser manufacturing processes for use in an industrial production environment. Acceptable forms of proof of the commercial gain to be achieved through implementation of the R&D results include new products or product features, enhanced product quality, simplified and more stable process flows, or a more cost-effective or higher-throughput manufacturing system.

The introduction of innovative laser-based manufacturing techniques relies on the experimental testing, development and application of new laser systems or laser-assisted manufacturing processes. The success of an innovation can be judged on the basis of the cost-benefit ratio demonstrated by pre-production models, industrial prototypes, or series production. The immediate value of breakthrough innovations in laser technology developed in an applied research context can be measured in terms of the industry-targeted transformation of laboratory results. As a rule, it is possible to assess the potential stimulus to innovation through feasibility studies, demonstration models, or pilot production runs, and by their patentability.

In keeping with the original purpose of the award, applications are especially invited from individuals working in industry or at universities or independent research centers who have successfully conceived and implemented an innovative idea relating to laser technology, following the project through from early-stage laboratory research to ultimate industrial application.

## 2.3. Prize money and fellowship title

The prizewinner will receive the sum of 10000 Euros in recognition of his work, and be furthermore awarded the title of »AKL Fellow« and »ELI Fellow«. The official presentation of the award will take place at the International Laser Technology Congress AKL'16 on April 27, 2016 in Aachen.

## 2.4. Jury and selection procedure

A shortlist of the 3 best candidates, called finalists, will be compiled by an international jury consisting of equal numbers of members drawn from the association Arbeitskreis Lasertechnik e.V. and the European Laser Institute ELI. The members of this panel of experts are nominated on a two-yearly basis by AKL e.V. and ELI. The international jury members are recruited from industry and the research community. They are responsible for assessing the quality of the applications. The prize-winner as well as the second and the third placed finalists are selected on the basis of merit. Any and all legal recourse is explicitly barred.

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## 2.5. Assessment criteria

The jury's decision is based principally on the following criteria:

- Proven commercial benefit
- Innovative quality of the resulting laser beam source, laser manufacturing process or laser system
- Scientific / technological quality of the underlying research
- Creative approach to technology demonstrated by the designated individual or project group
- Importance of the contribution of the applicant's work to the overall innovative process

## 2.6. Public relations

In accordance with the objectives of the award scheme, the names of the winner, the second and the third placed finalists will be announced to the professional community and the public at large in an official award ceremony organized in conjunction with the International Laser Technology Congress AKL. Press releases will be issued to inform the trade press and general media.

By their participation in the award competition, candidates acknowledge and accept that their project work will be publicized by the means cited above in the case of being selected to receive an award, and agree to actively support the public relations activities of the two associations Arbeitskreis Lasertechnik e.V. and European Laser Institute ELI by supplying background information for the press.

## 3. Instructions for applicants

### 3.1. Conditions for entry

Applications are accepted in the name of individual researchers and on behalf of whole project groups who have conceived and implemented an outstanding innovation in laser technology that conforms with the technological fields of interest detailed above. In the case of a project group, one individual must be designated as the applicant representing the group. Applications by jury members are not permitted.

Applicants must be able to provide documentary evidence of the innovative value of their work and its benefit to industry. The innovation must have been implemented in industry no more than 3 years prior to application for the award. Applicants must work for universities, R&D centres or companies established in Europe.

Only fully completed applications will be accepted. The application and supporting documentation must be in English and submitted in timely manner before the closing date. By submitting an application, the candidate confirms and agrees to permit publication of the work in question and agrees to attend the official presentation ceremony held during the International Laser Technology Congress AKL if he will be selected as one of the three finalists and unless prevented from doing so by unavoidable circumstances.

# INNOVATION AWARD LASER TECHNOLOGY

## 3.2. Application documents

The online application form on [www.innovation-award-laser.org](http://www.innovation-award-laser.org) has to be filled out.

The following input is required:

- Description of the innovation
- Curriculum vitae with passport-size photo of the applicant
- For project group entries: a list of all persons involved (title, surname, first name(s), company / institute, place, department, function, contribution to the innovation)
- Abstract (1 page maximum) accompanied by additional photographic material (for use in press releases if the entry is selected for an award)
- Copies of relevant publications and / or patent specifications concerning the innovation
- Written authorization of the company / partners for or with whom the project was undertaken
- In the case of applications on behalf of a project group, a declaration of agreement signed by all members of the group
- References

## 3.3. Online Submission of application

The application can only be submitted online via [www.innovation-award-laser.org](http://www.innovation-award-laser.org).

All requested application documents should be uploaded to this website.

For any questions please contact: [award@innovation-award-laser.org](mailto:award@innovation-award-laser.org).

## Closing date for applications:

The full set of application documents must be received by January 15, 2016 at the latest.

Any and all legal recourse is explicitly barred.

## Queries concerning applications should be addressed to:

[award@innovation-award-laser.org](mailto:award@innovation-award-laser.org)

## Contact Partners:

Arbeitskreis Lasertechnik: Dipl.-Phys. Axel Bauer

European Laser Institute: Dr. Stefan Kaieler

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### **3.4. Acceptance of conditions and confirmation of legal title**

Applicants represent and warrant that they hold full legal right, title and interest to the submitted documents or that they possess all requisite permissions, authorizations and waivers to disclose them with respect to this competition. In the case of applications on the behalf of a project group, the submitting applicant shall make this representation and warranty on behalf of all group members. Any expenses incurred by the organizers as the result of an incorrect declaration in the application shall be fully indemnified by the applicant, and will lead to disqualification. Applicants agree to indemnify and hold harmless Arbeitskreis Lasertechnik e.V. and the European Laser Institute of all liability for claims filed by third parties.

By submitting the application documents, the applicant agrees to abide by the conditions for entry. In doing so, applicants also grant permission to Arbeitskreis Lasertechnik e.V. and the European Laser Institute to process the application documents for the purpose of selecting the winners of the Innovation Award Laser Technology, including forwarding these documents to external experts for their qualified opinion if deemed necessary. Application documents, once submitted, will not be returned. Applicants agree to the publication of the abstract project description and the accompanying photographic material, provided there is no infringement of any rights of third parties.

Arbeitskreis Lasertechnik e.V. and European Laser Institute ELI reserve the right to modify the conditions for participation in the competition. Any and all legal recourse is explicitly barred.

## INNOVATION AWARD LASER TECHNOLOGY

### Application form »Innovation Award Laser Technology 2016«

Please complete the online application form and upload all requested application documents. Please answer all questions, concentrating on the main significant points. If the online form does not allow room for relevant details or additional comments, such information may be added by uploading. The designated representative of the project group is requested to list the names of all group members.

#### Details of applicant

Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Company: \_\_\_\_\_  
Department: \_\_\_\_\_  
Function: \_\_\_\_\_  
Address (work): \_\_\_\_\_  
optional (home): \_\_\_\_\_  
Phone (work): \_\_\_\_\_ (optional home): \_\_\_\_\_  
E-mail (work): \_\_\_\_\_ (optional home): \_\_\_\_\_

Please upload a curriculum vitae as pdf-file with a passport-size photograph of the applicant as separate jpg-file.

#### Details of additional persons in the case of applications on behalf of a project group

Please specify the names of all persons who form part of the project group (title, surname, first name(s), company/institute, country, city, department, function).

#### Innovation

1. Title of application:  
\_\_\_\_\_
2. The sectors of industry that stand to benefit from application of the innovation:  
\_\_\_\_\_  
\_\_\_\_\_
3. Problem definition and current state of the art:  
\_\_\_\_\_  
\_\_\_\_\_
4. The innovation and the approach to the solution:  
\_\_\_\_\_  
\_\_\_\_\_

## INNOVATION AWARD LASER TECHNOLOGY

5. The main aspects of technological progress to which the innovation contributes:  
(please tick the boxes where appropriate)

- Reduced manufacturing costs for an existing product
- Improved quality in an existing product
- New product
- New product feature
- Reduced process costs
- Shorter development lead time
- Improved working conditions
- Improved quality assurance
- Other: \_\_\_\_\_

6. The chief advantages of the innovative solution by comparison with state-of-the-art methods:

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7. The commercial benefit to be gained:

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8. When was the innovation first implemented in industrial practice?

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9. Abstract (1 page max. as word-file) accompanied by additional photographic material (jpg-files, 300 dpi) for use in press releases if the entry is selected for an award

10. List of publications referring to the innovation (if available), specifying title of article, author(s), publication, issue. Publications that are considered to be useful for the assessment by the jury can be attached as pdf-files

11. List of intellectual property rights, including patents (if available). Copies of patents can be attached as pdf-files

12. Professional references of applicant, as separate attachment (specifying name, institution, address, phone number, e-mail)

13. Industrial partners, funding sources, with names of contacts as separate attachment (company or funding institution, country, city, name of contact partner, e-mail)



## INNOVATION AWARD LASER TECHNOLOGY

### Sworn declaration by the applicant

I hereby agree to fully comply with the conditions for participation in the competition, as stipulated by Arbeitskreis Lasertechnik e.V. and European Laser Institute ELI in the application instructions for the Innovation Award Laser Technology - and in the event I represent a project group, I so agree on behalf of the group members. I represent and warrant that I - and all other named members of the project group, if applicable - hold full legal right, title and interest to the innovation described in the submitted documents or - in the case of transfer or employee status - the legal owner has issued all requisite permissions, authorizations and waivers to disclose the innovation with respect to this competition. I hereby indemnify and hold harmless Arbeitskreis Lasertechnik e.V. and the European Laser Institute of all liability for third-party claims.

Name / First name: \_\_\_\_\_ Function: \_\_\_\_\_  
Company / Institution: \_\_\_\_\_  
Place / Country: \_\_\_\_\_  
Phone: \_\_\_\_\_  
E-mail: \_\_\_\_\_  
Title of application: \_\_\_\_\_

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_

### Declaration of agreement by participating partners

- a) In the case of applications on behalf of a project group, a declaration of agreement signed by all members of the group (as separate attachment)
- b) Written authorization of the companies / partners for or with whom the project was undertaken – if they are not members of the applying group (as separate attachment)

Please use the templates for download on: [www.innovation-award-laser.org](http://www.innovation-award-laser.org).

### Data protection

By submitting this application for the Innovation Award Laser Technology organized by the association Arbeitskreis Lasertechnik e.V. and the European Laser Institute, I hereby authorize Arbeitskreis Lasertechnik e.V. and European Laser Institute ELI to store my personal data and the information contained in the application documents for the designated purpose. I furthermore grant my permission to the jury to forward the application documents to external experts in order to obtain a qualified opinion, if necessary. In the event I represent a project group, I so agree to both approvals on behalf of the group members. This applies also to the storage of the personal data of the other group members.

Name / First name: \_\_\_\_\_  
Company / Institution: \_\_\_\_\_

Place, Date: \_\_\_\_\_ Signature: \_\_\_\_\_