Linear Collider Forum of Japan

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Objectives:

Accelerate LC Project in Cooperation with Academic Community

History:

Established in October, 2002

Members:

62 Industries (Electric Machineries, Heavy Industries, Steel & Materials, Instrumentations, Constructions, etc.)

121 Researchers

1 NPO (Atomic Energy Forum of Japan)

Organization

Japan High Energy Physics Committee

Board of Directors

Steering Committee

Secretary's Office

International Collaboration WG

Technology Development WG

Computer System WG

Associated Infrastructure WG

Missions

- The objectives of the Forum are to
  - establish international industrial collaboration scheme, and
  - discuss industry's role in facility design and construction,
  - assess associated infrastructure and economical effects.
- Another object is to provide a forum for information exchange between academic society and industrial communities.

Activities

- Ordinary Meetings/Lectures
- Cost Estimation (Cold & Warm Technologies)
- Participation in ILC Regional Working Groups
- Information Exchange with Overseas Laboratories (DESY, CERN, FNAL, SLAC, JLab, SNS, BNL)

General Meeting of the Forum

Japanese Industry in Accelerator Construction

- Japanese industry is very proud of having constructed accelerator systems in many areas including high-energy physics, nuclear physics, synchrotron light source and medical application.
- High performance, high reliability, high operability and good maintainability feature these systems.
- Japanese industry acquires valuable technologies through developing and constructing accelerators.

What does Industry Expect for ILC

- Technology innovations through accelerator component fabrication and system construction, and technology spin-off to commercial business
- Increasing number of physicists and engineers who wish to join industry for dedicating themselves to this project,
  and
- Business opportunity of several billion $.

Understanding of Industry for Construction of ILC

- Significant uncertainty in the cost estimation of the main linac components.
- Development of mass production technologies for
  cost reduction, high quality assurance,
  high production rates, etc.
  is crucial.

What Should We Do

- R&D efforts are indispensable for development of mass production technologies
- R&D has to be implemented as soon as possible to meet with the proposed construction schedule.
- Intensive international cooperation between academic society and industry should be established.

Conclusions

- Japanese industry eagerly expect that ILC Project will start as soon as possible.
- Intensive R&D activities are crucial and should be implemented soon with world-wide collaboration.