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PSI Guest Editorial

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Engineers are normally very concerned with day-to-day problems and "fire engine jobs." But they should also take time to think seriously about participation in various professional engineering societies and in the activities of cooperative research organizations, such as the Welding Research Council.

By actively working as a member of such task forces, subcommittees and committees, the engineer or scientist contributes to the advancement of his profession. He also can learn from the interaction with his fellow engineers. Participants mutually encourage and stimulate creative thought. The results will truly be an increase in productivity in solving complex research problems requiring the application of many different disciplines and viewpoints.

Unfortunately, only a small percentage of engineers and scientists develop an interest in research. In turn, only a small percentage of this group has the ambition and dedication to participate actively in the hard work of planning and guiding various projects that are sponsored by research groups.

Research groups develop important advances in engineering data on materials, mathematical design formulas, fabrication techniques and applications of engineering components and structures. In the case of the Welding Research Council, this information is essential for designing welded pressure vessels, welded piping for power plants, welded pipelines for oil and gas transmission, welded beams and girders for bridges and buildings, and, of course, for welded ships of all types.

Improvements in materials, design and fabrication come about only by continual hard work by many scientists and engineers.

Progress in welding research is possible only because people trained in many different disciplines cooperate in solving welding problems involving the use of knowledge in metallurgy, physics, electrical engineering, mechanical engineering, civil engineering, mathematics, and non-destructive testing, as well as other areas.

There is no better way for an engineer to broaden his knowledge and interests, and thereby grow in his profession, than by working with his fellow engineers and scientists of many different talents on solving specific research problems. At any given time, the Welding Research Council usually sponsors some fifty different research projects. As you can see, we need a relatively large number of actively participating engineers and scientists on our committees. At the present time we have somewhere between 600 and 700 active participants.

It is also important to emphasize that more young engineers should take the examinations required to obtain their professional engineering license. This, along with working in research groups, will greatly assist the professional growth of the young engineer. By giving of himself, he will gain far more than he gives. And, just as gratifying, are the many close, lifelong friendships.

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