# Railway & Transport

Special Feature
Railways and Universities

Japanese Railway History **Special Pictorial** 



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■ JB Fast Star 21 Shinkansen test train boarding Keio University students at Echigo-Yuzawa Station (Keio University)

# F.ditorial.

# Railway-university cooperation

Able rail managers want to save money as much as possible. Ambitious rail engineers want to spend money for future developments. Inevitably they tend to be hostile each other, and in most cases the managers defeat the engineers.

However, we must remember that today's advanced railways owe far more to gifted engineers than to stingy managers. Today's competent railways are very different from the railways 100 years ago, and without many technical breakthroughs achieved in recent decades, railways would not have endured the challenges from air and road transport.

But today, we have to acknowledge the fact that the railway no longer attracts so many scholars and students as it used to before. People find the frontiers of science and technology in other fields than railways. But railways still need brilliant researchers and engineers to ensure their future developments.

Another important fact is that railway engineering heavily depends on 'field' experiences, which very much differ from country to country and region to region. The railway is somewhat different in this sense from road or air transport, where Toyota's motor vehicles or Boeing's aircraft can be used everywhere in the world. Hence railway engineering has always been empirical and practical.

Here lies a ground of railway-university cooperation as presented in this issue, and some countries have surely made progress. But the outcome of such progress has so far been confined in each country, and we also have to realise that there are many other countries which cannot afford such luxury. Experiences differ from country to country as mentioned above, and this justifies research and development on a national basis. But is it really impossible to establish international cooperation in R & D for railways in developing countries?

[T. SUGA]

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