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Editor Address:

Polish Academy of Sciences:
Office of Analyses, Scientific
Information and Publications

PKiN, Pl. Defilad 1, 00-901 Warsaw, Poland

e-mail: academia@pan.pl

www.pan.pl/academia

Subscription:

academia.prenumerata@pan.pl

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Tap the bounty of science!

Ever since *Academia's* very first issue, we have striven to showcase the richness and broad diversity of research efforts underway at the Polish Academy of Sciences. To date we have carried more than 200 articles by Academy-affiliated authors, highlighting the latest, most captivating results of their work and potential applications. Such an abundance of intellectual pursuits has inspired us to focus this current issue on "richness," in both its abstract and more literal senses.

On the cellular level, the fundamental process of gene-copying is performed by special enzymes called DNA polymerases. Mammalian cells turn out to have a surprisingly diverse set of different kinds of such enzymes (p. 24): some doing most of the replication work, others acting like "special agents" in critical situations, rescuing the genome's integrity sometimes at the expense of introducing errors.

We also take a look at amber, the "gem" of northern Europe, in which entomologists are discovering seemingly frozen ancient worlds (p. 12). Poland's mineral riches also include extensive deposits of copper and silver ore, hard coal, and brown coal. **Underground Treasures** (p. 28) considers which mineral commodities are likely to remain strong exports for Poland in the future, and how the demand for raw materials has surged in the past two centuries.

No issue devoted to richness and abundance could be complete without discussing the protection of our precious natural resources: **Nature's Property** (p. 38) views the creation of special biosphere reserves and "ecological corridors" in Poland, under UNESCO's Man and Biosphere Programme.

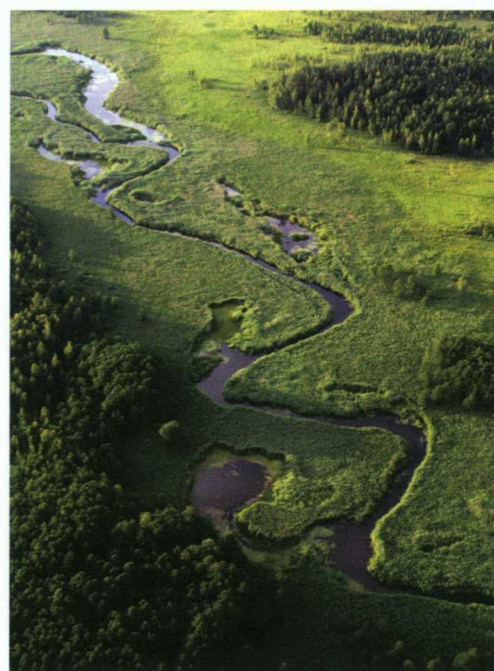
Moving from the Earth's surface to the outer space, astronomers take us on a search for places where **extraterrestrial life** may have developed (p. 16), looking at the methods used in seeking it. We also try to tally up the number of "real" planets in the Solar System and discover what other celestial bodies orbit the Sun (**Cosmic Cleanup** on p. 4).

While amber inclusions, mineral commodities, and planets might be considered the traditional "stuff" of specialist research, money and wealthy people always seem to be a point of interest for everyone. In **Looking Down at the Rich** (p. 8), we will consider the Polish public's attitude towards affluence. And since such views are closely linked to Poles' convictions about the legitimacy - or illegitimacy - of the prevailing social order and its effective functioning, this article should be interesting reading for politicians.

Finally, this issue will touch upon an important direct link that can exist between science and wealth, i.e. money to be earned from certain advances in research, such as the kind of potential industrial and medical applications presented in the articles **Magic Rods** (p. 40) and **Food as a Shield** (p. 34). They show how microorganisms can be modified for use in preventative medicine and in treating various ailments - and such prevention is something all of us perhaps need as much help with as we can get, in this difficult autumn season!

ACADEMIA staff

Poland's beautiful Rospuda River has recently become well-known for more than just its natural diversity (see p. 50)



Jerzy Gumowski/Agencja Gazeta