

into Arabic; and the Caliphs, Al Mansur, Harûn-al-Raschid, and Al Mamûn, endeavoured to attract to their courts the best scholars of all countries. Thus they handed down to posterity many of the most valued treasures of ancient learning, and they appreciably contributed to the knowledge of mathematics, astronomy, alchemy, medicine, and zoology. Geology and palæontology, however, the kindred studies of the rocks and their fossil contents, were almost neglected by them.

It was not until the close of the Middle Ages, in the fifteenth century, that a revival of learning spread through Europe. The discovery of the art of printing brought books within the reach of many. The keen interest in classical authors displayed by the leaders of the Humanist movement infused new life and activity into mental effort in every branch of knowledge. Universities, learned societies, and academies were founded.<sup>1</sup> The methods of dogmatism were cast aside with the decay of scholasticism. Copernicus the Prussian (1473-1543) absorbed the best learning that Italy could give him, and rewarded the care of his foster-country by unfolding to futurity the system of the universe that bears his name. The Reformation gave an impulse to all men to think for themselves, and no longer to accept blindly the traditions of past ages. Columbus, Vasco da Gama, and other bold navigators added the Western Hemisphere to the former domain of geographical knowledge. And if less imposing, still no less certain, was the steady advance made in natural science under the influence of the healthier tone that prevailed. Men turned in earnest from

<sup>1</sup> Italy led the way in founding academies during the era of the Renaissance of literature and research. The "Platonic Academy" was the name given to a group of learned men who were under the patronage of Cosmo di Medici, in Florence; but this society had no definite organisation. The Academy in Padua, founded in 1520, must therefore be regarded as the oldest scientific society, although it was not long in existence. In 1560 an Academy of Natural Science was founded at Naples, and in 1590 the Academy dei Lincei in Rome was founded by the Marcese de Monticelli. It was not until the middle of the seventeenth century that the scientific academies of France, England, and Germany came into existence; then were established the Académie Française in 1633, the Royal Society of London in 1645 (established in 1662 with incorporated rights), the Académie des Sciences in Paris in 1666, and the Akademie der Wissenschaften in Berlin in 1700. In 1725, Empress Catherine founded the Academy in St. Petersburg, and in the same year the Royal Society of Sciences was formed in Upsala. Since that time scientific societies have been founded in most of the large university towns.