

Editorial

Covid-19 pandemic has been a set-back for scientific productivity and the road to recovery must focus on improving the mental health and well-being of scientists

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The COVID-19 pandemic had devastating effects on the lives of populations across the world. The scientific community and their work was not immune from its harmful effects. Many scientists died from COVID-19 infection, including young and senior scientists. To prevent the spread of the virus, restrictions and lockdowns were introduced. Universities and research laboratories were shut down. This prevented researchers from carrying out laboratory experiments. It is, therefore, not surprising that a decline in scientific productivity has been reported [1–5]. One size does not fit all, and not all researchers were affected equally by the COVID-19 pandemic. For example, women, parents of young children and people from certain racial groups were most affected [1–5]. It is not surprising that mental health of researchers were affected due to the diverse impacts of the COVID-19 pandemic. The author of this article lost close relatives and friends due to COVID-19 infection in the United Kingdom and other parts of the world. It created fear and uncertainty that disturbed the normal pattern of life we took for granted, at least in those parts of the world unaffected by war, famine or other disasters.

The field of spectroscopy, which is the key focus of this journal, showed a decline in the number of publications in 2022 (see Fig. 1). The number of publications in the field of spectroscopy has been progressively increasing year by year and the decline in 2022 can be attributed to the COVID-19 pandemic. Spectroscopic measurements require access to instruments in laboratories which were closed during the pandemic, preventing generation of new data. Travel restrictions prevented scientists from visiting other countries and working with their collaborators. Access to specialised equipment such as synchrotron, X-ray and other techniques were not possible. Furthermore, the negative impacts of the COVID-19 on the lives of spectroscopists, including their mental health, have played a role in reducing their productivity [1–5]. It is hard to say anything positive about the COVID-19 pandemic considering its devastating effect on human lives. However, one cannot ignore the fact it did have some positive impacts for science. This includes the development of novel vaccines and anti-virals. It also triggered scientific research and clinical trials on natural products including traditional medicines for their potential anti-viral effects.

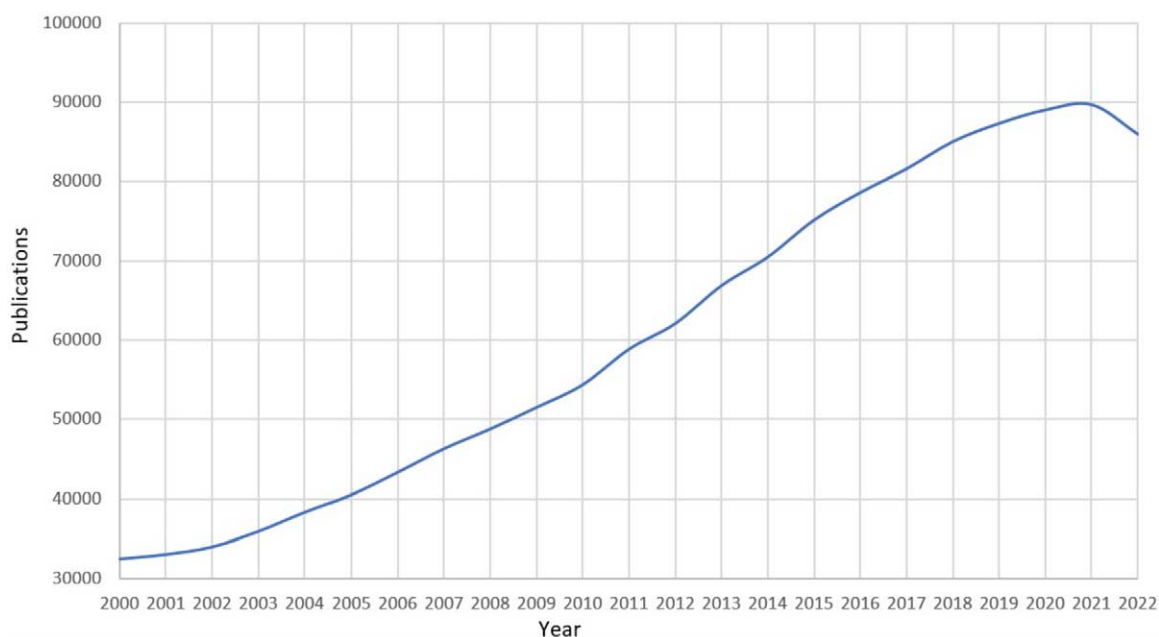


Fig. 1. Number of publications where the word 'spectroscopy' appears in articles published between 2000 and 2022. Data was obtained using Web of Science.

As a consequence, respect for scientists and the benefit their research brings for humanity has become clearer to the general public. This is great for the future of science and scientists in general.

The world was not prepared for the COVID-19 pandemic and its damaging effects will take time to recover. It is important to address the harmful effects of the pandemic on scientists. This needs to include senior researchers, early career scientists, technical staff, and undergraduate and post-graduate students who experienced the COVID-19 pandemic. Taking pro-active measures to support the mental health and well-being of scientists are necessary to raise their morale and motivation. This is the responsibility of academic, industrial and research institutions. A personalised approach towards recovery from the impacts of COVID-19 needs to be developed. At the same time, scientists need to help themselves and this can be achieved by creating a positive work environment through cooperation, collaboration, and healthy competition. As scientific conferences and travel between laboratories increase, greater interaction between scientists will bring positive outcomes. This can include sharing of experiences and approaches for overcoming the trauma of the pandemic and developing resilience. I propose the establishment of an international network of COVID-19 impacted scientists (INCIS) for this purpose. This will not only help those who suffered from COVID-19 but also provide valuable knowledge and experiences to prepare for future pandemics. Let us hope another pandemic will not come, but we should prepare for the worst and not become complacent. An integrated approach needs to be employed to speed up the road to recovery.

Conflict of interest

The author has no conflicts of interest to declare.

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