

## Editorial

# Preface

## 50th anniversary special issue, in memoriam John Jones

This Special Issue to celebrate the 50th Anniversary of the *Journal of Labelled Compounds and Radiopharmaceuticals* was initiated by the late Professor John R. Jones in his role as Editor of the Journal. Sadly as you no doubt know John passed away during the preparation of the volume; hence it seemed appropriate to dedicate this special volume to the memory of his work and that of his friends and colleagues in the field of isotopically labelled compounds and radiopharmaceuticals. This volume has therefore been renamed the 50th Anniversary Special Issue, In Memoriam John Jones.

The authors of the papers in this volume were invited by John to submit papers giving a historical survey of the work carried out in their institutions over the past 50 years or on a particular field of research related to the theme of the journal over this time period. They were encouraged to indicate the names of the key individuals who carried out the work or who played a key role in the advance on the use of isotopically labelled compounds and radiopharmaceuticals in these institutions. Many of these people mentioned were the pioneers in their particular field of scientific research and were the creators of new research departments in industry and in academic and hospital institutions. I am very pleased to say that many responded to this invitation, and we have an excellent selection of reviews in this Special Issue.

This series of papers contains the historical accounts on the development of institutions, technologies and applications in the field of isotopes over the past 50 years. Kitson<sup>1</sup> talks about the development of The Radiochemical Centre in Amersham, UK, about what it is today as a part of GE Healthcare a major producer of isotopes and isotopically labelled compounds.<sup>1</sup> Frank *et al.*<sup>2</sup> review the domain of imaging, which is of particular interest to GE Healthcare today.<sup>2</sup> Heys<sup>3</sup> surveys the developments in the use of organoiridium complexes for use in hydrogen exchange labelling techniques that have increased in importance because of the need for rapid methods for the labelling of compounds with the hydrogen isotopes deuterium and tritium.<sup>3</sup> Lockley<sup>4</sup> continues with a similar theme of ortho-directed hydrogen isotope exchange labelling.<sup>4</sup> Filer<sup>5</sup> then reviews the developments over the years

that have seen New England Nuclear develop into part of PerkinElmer Life Sciences, which is a major supplier of isotopically labelled compounds and also in many other technologies useful for scientists working with isotopes.<sup>5</sup> Långström *et al.*<sup>6</sup> outline the developments that make [<sup>11</sup>C]carbon monoxide a versatile and useful precursor in labelling chemistry for PET ligand development.<sup>6</sup> Wheeler<sup>7</sup> takes a look back over the past 50 years in the Eli Lilly and Company in the area of isotopic chemistry.<sup>7</sup> Pleiss<sup>8</sup> describes the development of the important calcium antagonist drugs by Bayer, these being the 1,4-dihydropyridines and the importance of isotopic labelling in their development.<sup>8</sup> Myasoedov<sup>9</sup> describes a technique that he and his colleagues have been developing for many years and which is high-temperature solid-state catalytic isotopic exchange (HSCIE), which is very useful for the synthesis of tritiated-labelled compounds and especially for complex molecules.<sup>9</sup> Dollé<sup>10</sup> describes the development of PET chemistry at the Hopital Frédéric Joliot in Orsay, France, one of the world's first PET centres.<sup>10</sup> Susan<sup>11</sup> outlines the history of the International Isotope Society, to the development of which he has made a major contribution.<sup>11</sup> Hesk and McNamara<sup>12</sup> gave an overview on the developments of isotopically labelled compounds at Schering-Plough.<sup>12</sup> Kabalka<sup>13</sup> describes the useful applications of organoboranes in the field of isotopically labelled compounds.<sup>13</sup> Steinbach and Spies<sup>14</sup> describe the developments of PET chemistry at Rossendorf.<sup>14</sup> Brady *et al.*<sup>15</sup> give a historical review of one of the world's first PET centres at Hammersmith, UK.<sup>15</sup> Harding<sup>16</sup> describes the development of synthetic isotopic chemistry at Alderley Park, AstraZeneca.<sup>16</sup> Seidel *et al.*<sup>17</sup> give us the background to the carbon-14 labelling approaches required in the development of Acarbose by Bayer over more than 20 years.<sup>17</sup>

## REFERENCES

1. Kitson S. *J Label Compd Radiopharm* 2007; **50**: 737–745.
2. Frank R, Långström B, Antoni G, Montalto MC, Agdeppa ED, Mendizabal M, Wilson IA, Vanderheyden J-L. *J Label Compd Radiopharm* 2007; **50**: 746–769.

3. Heys JR. *J Label Compd Radiopharm* 2007; **50**: 770–778.
4. Lockley WJS. *J Label Compd Radiopharm* 2007; **50**: 779–788.
5. Filer C. *J Label Compd Radiopharm* 2007; **50**: 789–793.
6. Långström B, Itsenko O, Rahman O. *J Label Compd Radiopharm* 2007; **50**: 794–810.
7. Wheeler WJ. *J Label Compd Radiopharm* 2007; **50**: 811–817.
8. Pleiss U. *J Label Compd Radiopharm* 2007; **50**: 818–830.
9. Myasoedov NF. *J Label Compd Radiopharm* 2007; **50**: 831–847.
10. Dollé F. *J Label Compd Radiopharm* 2007; **50**: 848–866.
11. Susan AC. *J Label Compd Radiopharm* 2007; **50**: 867–874.
12. Hesk D, McNamara P. *J Label Compd Radiopharm* 2007; **50**: 875–887.
13. Kabalka G. *J Label Compd Radiopharm* 2007; **50**: 888–894.
14. Steinbach, J, Spies H. *J Label Compd Radiopharm* 2007; **50**: 895–902.
15. Brady F, Clark J, Luthra S. *J Label Compd Radiopharm* 2007; **50**: 903–926.
16. Harding JR. *J Label Compd Radiopharm* 2007; **50**: 927–932.
17. Seidel D, Wehlmann H, Lenz J. *J Label Compd Radiopharm* 2007; **50**: 933–943.

John Allen  
Global Isotope Chemistry & Metabolite  
Synthesis Department, Sanofi-Aventis R&D,  
1, Avenue Pierre Brossolette,  
91385 Chilly Mazarin, France