

seine Ehrsucht zu befriedigen und um seinem Hasse Genüge zu leisten.

Kekulé ist, wenn ich ihn recht kapire, zu feige, um mir jetzt nach dem Aufdecken seines schmähhlichen Treibens, offen die Spitze zu bieten.

Eben so leid sollte es mir sein, wenn Du für Hofmann die Kastanien aus dem Feuer solltest holen wollen. Wie ich Kekulé tief verachte, so hoch schätze ich Hofmann und zwar nicht bloss als Chemiker sondern auch als Mensch, *so weit* seine unbändige Eitelkeit - sein grösster Feind - ihn nicht missleitet. Ich bin Hofmann aus früherer Zeit persönlich zu grossem Dank verpflichtet, und werde nie vergessen, was er für mich gethan hat (15) aber ich kann mich nicht zu seinem Sklaven machen. Ueber eine gewisse Grenze hinaus muss die Dankbarkeit der Pflicht nachstehen, welche ich gegen unsere Wissenschaft zu haben glaube.

Seit Hofmann, in England durch höchste und hohe Gunst verwöhnt, nach Deutschland zurückgekehrt ist, hat er in mir einen Rivalen entdeckt und mir seine frühere Freundschaft entzogen; so oft ich ihn in Berlin besuchte, in der Hoffnung auf ein gemeinschaftliches aber unabhängiges Zusammenwirken in der Chemie, hat *er* auf mein Entgegenkommen nie mehr reagirt, nie mich in Leipzig mit seinem Besuche erfreut. Er kann es nicht vertragen, dass ich, ganz gegen meine Intention, mit ihm in Deutschland erfolgreich concurrirte.

Um in Deutschland unter den Chemikern zu herrschen, hat er sich die chemische Gesellschaft in Berlin gegründet, und sie nicht ohne Absicht "die Deutsche" genannt. Von dieser Stelle aus - Hofmann *ist* die chemische Gesellschaft, die andern sind seine gehorsamen Trabanten und widrige Judenjungen - hat er mich da ich mich ihm nicht unterdrücke seit Jahren wo sich Gelegenheit bot misshandelt; ich habe mit Rücksicht auf die Vergangenheit, so weit es anging, dazu geschwiegen. Hätte er nur offenes Visir gezeigt! Aber er liebt es, Andere in Bewegung zu setzen, und sich selbst hinter den Coulissen zu halten.

Nimm es mir nicht übel, wenn ich hier Dir offen sage, dass ich fürchte, er hat auch Dich gekapert, und schickt Dich gegen mich ins Treffen. Ich würde mich *sehr* freuen, wenn ich darin irrte, eben so wie es mir sehr leid sein sollte, wenn, falls ich nicht irre, unser jahrelanges gutes persönliches Verhältniss dadurch getrübt werden sollte.

Denn, wie ich Dir mündlich schon sagte, ich bin nicht mehr der geduldige Kolbe, welcher, im blinden Vertrauen, (16) dass Andre meine Sache führen werden, Alles über sich ergehen lässt. Jeden Uebergriff, jeden unberechtigten und unberufenen Angriff, jede Einstellung der Wahrheit in der Chemie, weise ich mit Entschiedenheit kräftig zurück. - Möchte ich *nie* in die Lage kommen, gegen Dich Abwehr üben zu müssen.

Grüsse Deine liebe Frau und Bunsen, und hab Dank für die freundliche Aufnahme bei Euch am Dienstag. Wir haben hier himmlisches Wetter, südliches Klima. Ich fühle ich [sic] mich ein ganz anderer Mensch.

Der Deinige,  
H. Kolbe

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## CHEMICAL ARTIFACTS

### The Butlerov Museum at the University of Kazan

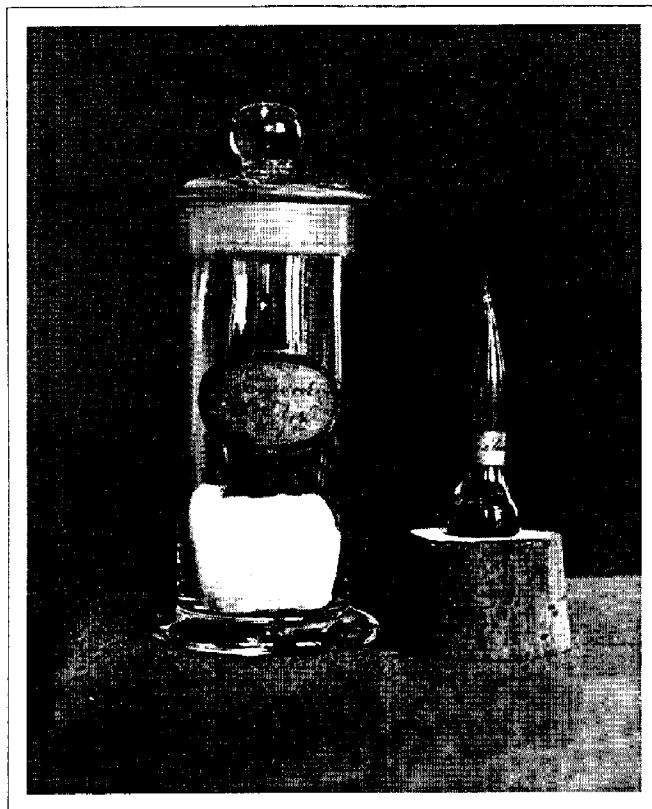
*John H. Wotiz, Southern Illinois University at Carbondale*

Kazan, the capital of the Tartar Soviet Republic, is located about 1000 kilometers east of Moscow near the Volga River (1). The University of Kazan was founded in 1804 and remained for a long time Russia's eastern most outpost for science and higher education. Its cultural influence reached into the Volga region, the Urals, Western Siberia, the Caucasus, as well as into Kazakstan and Central Asia. One of its early graduates was Nikolai Lobachevsky (1793-1856), the founder of non-Euclidian geometry. As Rector and Chairman of the Building Committee (1827-1846), he was responsible for the construction of many of the university buildings, including those for chemistry.

The Butlerov Museum houses artifacts relating to the work and careers of several famous Russian chemists connected with the University of Kazan. Though chemistry was first taught at Kazan in 1805 by German faculty largely imported from the Baltic region (2), it did not achieve an international



Aleksandr Milhailovich Butlerov



The sample of aniline prepared by N. N. Zinin in 1848.

reputation until the work of Nikolai Zinin (1812-1880) on the reduction of nitrobenzene to aniline. This was first accomplished in 1842, and a sample prepared by him in 1848 is among the items on display in the museum. Zinin was born in Azerbaijan and studied chemistry at Kazan and later with Liebig at Giessen. He was Professor of Chemistry at Kazan from 1841-1847, when he left to assume a position at St. Petersburg.

Zinin overlapped at Kazan with Karl Klaus (1796-1864). Born in Dorpat, Estonia, Klaus earned a doctoral degree in pharmacy at Kazan. In 1844 he isolated the element ruthenium, which he named in honor of Russia, and his original preparation is also among the items on display.

But perhaps the most famous chemist at Kazan was Aleksandr Milhailovich Butlerov (1828-1886), for whom the museum is named. A native of the Kazan region, he studied under Klaus and Zinin, and also worked in Wurtz's laboratory in Paris. In 1851 he became Professor of Chemistry at Kazan, where he remained until his departure for St. Petersburg in 1868. During his tenure at Kazan, he also served twice as Rector of the University. Best known for his introduction of the concept of chemical structure, Butlerov's contributions, both theoretical and experimental, made Kazan "Russia's Chemical Mecca". Among the talented students who came to

work with him were Vladimir Markovnikov (1838-1904), Aleksandr Zaitsev (1841-1910), Sergei Reformatski (1860-1934), and Flavian Flavitskii (1848-1917). All became famous in their own right and all held, in turn, appointments at Kazan in the period 1868-1911. Artifacts relating to their activities, mostly in the form of various compounds synthesized by them, are also on display.

The Butlerov Museum is located in the University's Chemical Institute, which is also named in Butlerov's honor. Some of his original furniture is still used in the office of its present director, Academician Boris A. Arbuzov. Together with the other items on display, they provide the visitor with a good introduction to the development of 19th century chemistry at the University of Kazan. Using the scale developed in my article on "Chemistry Museums of Europe", I would rate the Butlerov Museum as a "3", that is, it contains "original items and reconstructions worth seeing" (3).

The University of Kazan is also home to the Arbuzov



The office of Academician B. A. Arbuzov, current Director of the Butlerov Institute of Chemistry at the University of Kazan. Some of the furnishings in the office belonged to Butlerov.



Chemicals prepared by Zinin, Butlerov, Klaus, Markovnikov and Zaitsev on exhibit at the Butlerov Museum

Museum, which commemorates the life and achievements of the Kazan organophosphorus chemist, A. E. Arbuzov (1877-1968). This is housed in the residence in which he lived for more than half a century, along with his original furniture, his musical instruments, and his many honors, prizes, and awards. However, most of the chemical artifacts relating to his career are located in the Butlerov Museum, so there is little of direct chemical interest to be seen in the Arbuzov Museum itself.

#### References and Notes

1. Based on a paper presented at the 198th National Meeting of the American Chemical Society in Miami, FL, 10-15 September 1989. I would like to acknowledge the generous assistance I received while in Kazan from Academician Boris A. Arbuzov and Professor Rauza P. Arshinova of the Butlerov Chemical Institute which aided in the preparation of this article.

2. For a comprehensive review of early chemists at Kazan University, see N. Brooks, *The Formation of A Community of Chemists in Russia, 1700-1870*, Ph.D. Thesis, Columbia University, 1989. Dr. Brooks' assistance is gratefully acknowledged.

3. J. H. Wotiz, "Chemistry Museums of Europe", *Chemtech*, 1982, 12, 221-228.

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## HARRY JONES MEETS THE FAMOUS

*William B. Jensen, University of Cincinnati*

The attitude of historians and biographers toward the use of anecdotes has been, to say the least, ambiguous (1). One was summarily dismissed them as "yesterday's gossip grown stale". However, William Ellery Channing was definitely of the opposite opinion when he declared that:

One anecdote of a man is worth a volume of biography

and Isaac D'Israeli concurred when he wrote:

Some people exclaim, "Give me no anecdotes of an author, but give