

به نام خدا



مرکز دانلود رایگان  
مهندسی متالورژی و مواد

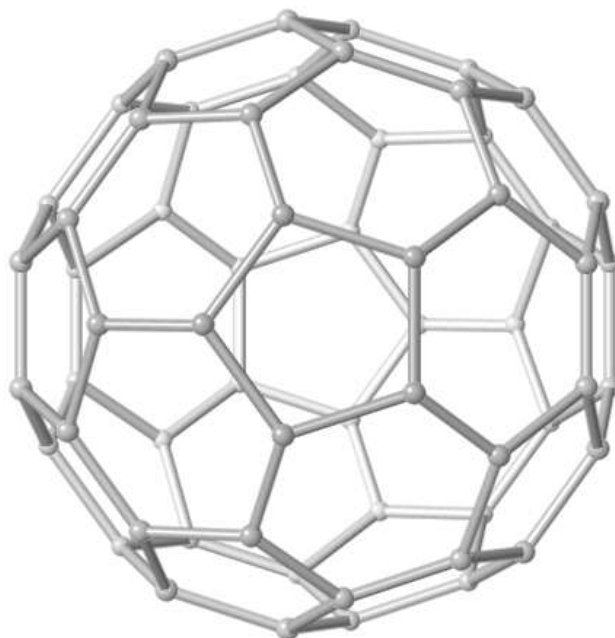
[www.Iran-mavad.com](http://www.Iran-mavad.com)



Steffen Weber's

# Crystallography Picture Book

## *Fullerenes*



# *Preface*

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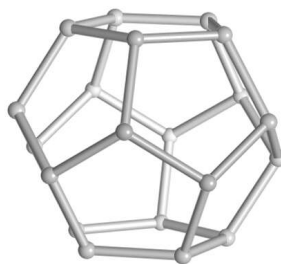
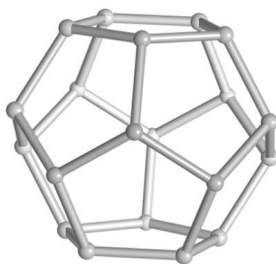
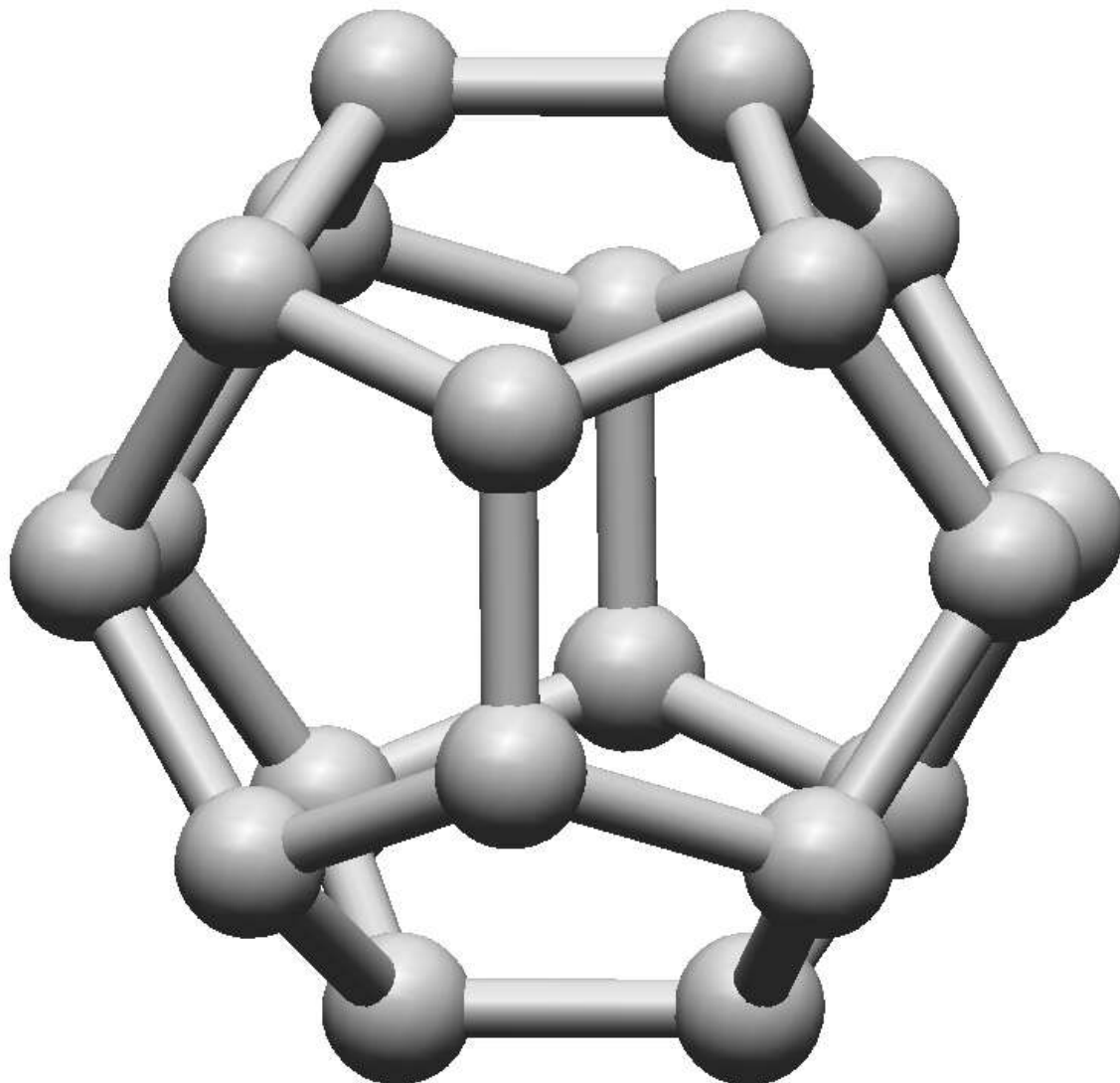
This is the second volume in the series of picture books that I am creating for educational purposes. All images in this volume were created using the program *NanotubeModeler* from JCrystalSoft and for the stereo views the program MDISV was used, which is included with JPOWD from MDI ([www.materialsdata.com](http://www.materialsdata.com)). A free version of *NanotubeModeler* program can be downloaded at [www.jcrystal.com](http://www.jcrystal.com). My earliest implementation of routines for the visualization of fullerenes was realized in JSV (Java Structure Viewer), a program which I wrote while working at NIRIM in Japan. This year I wrote *NanotubeModeler* as a stand-alone Windows application. This program can read and display the data files of M. Yoshida's Fullerene library.

*All xyz-data files used here were downloaded from M. Yoshida's website at:  
[www.cochem2.tutkie.tut.ac.jp/Fuller/Fuller.html](http://www.cochem2.tutkie.tut.ac.jp/Fuller/Fuller.html)*

*Steffen Weber, Ph.D.  
December 11, 2004  
Livermore, California  
[www.jcrystal.com/steffenweber](http://www.jcrystal.com/steffenweber)*

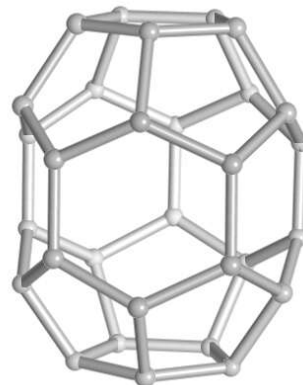
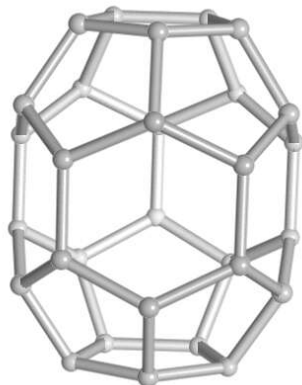
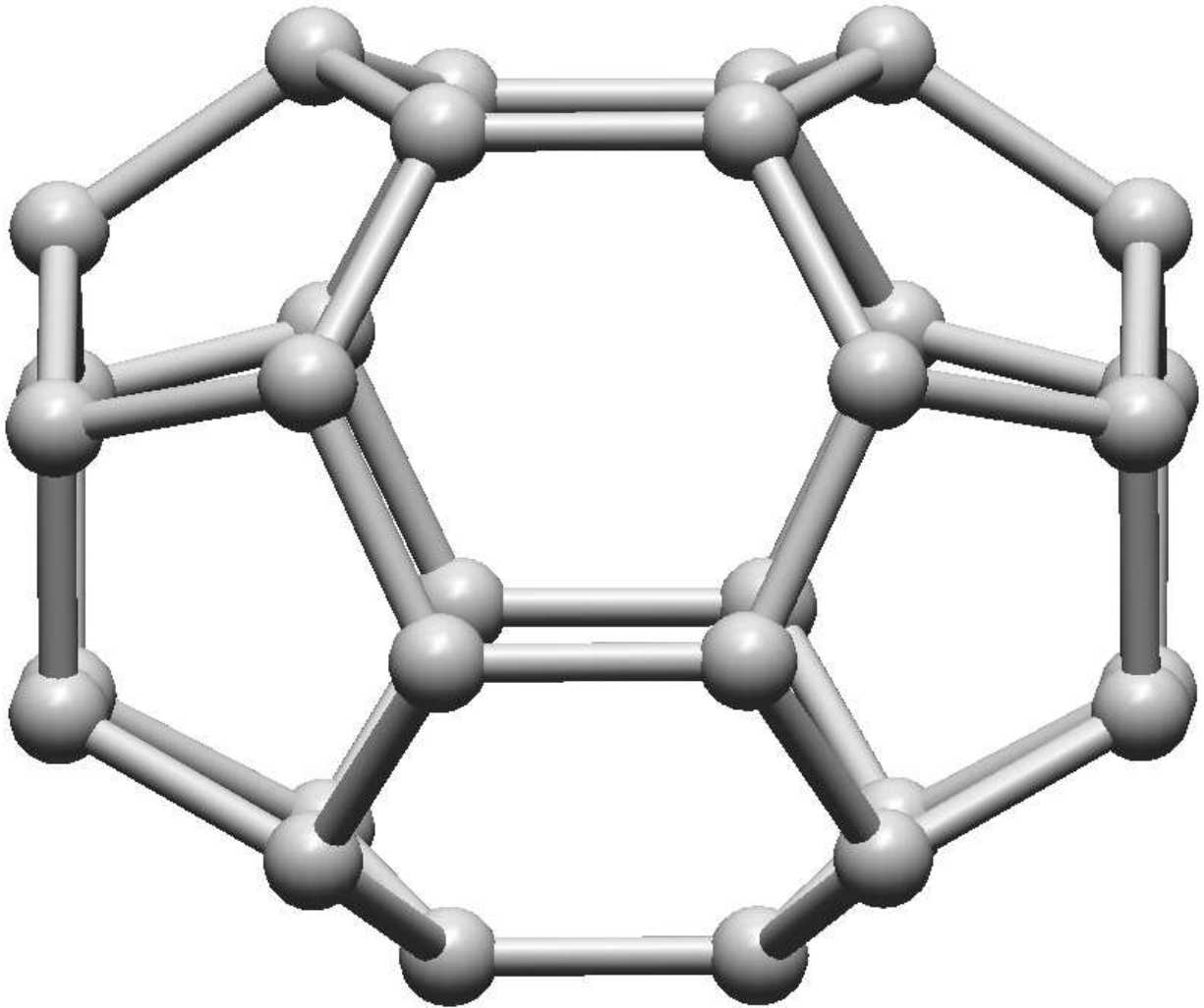
# $C_{20}$ ( $C_{20ih}$ )

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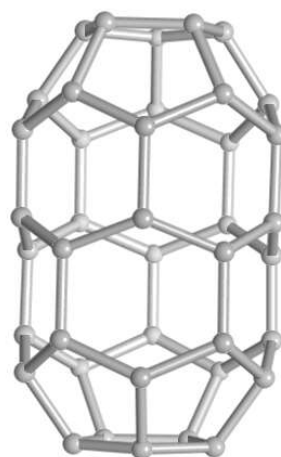
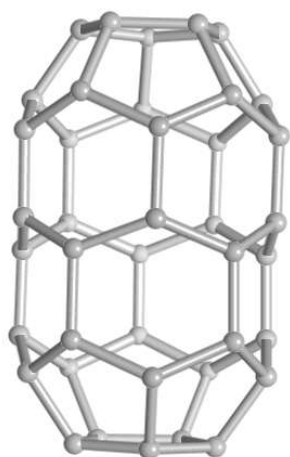
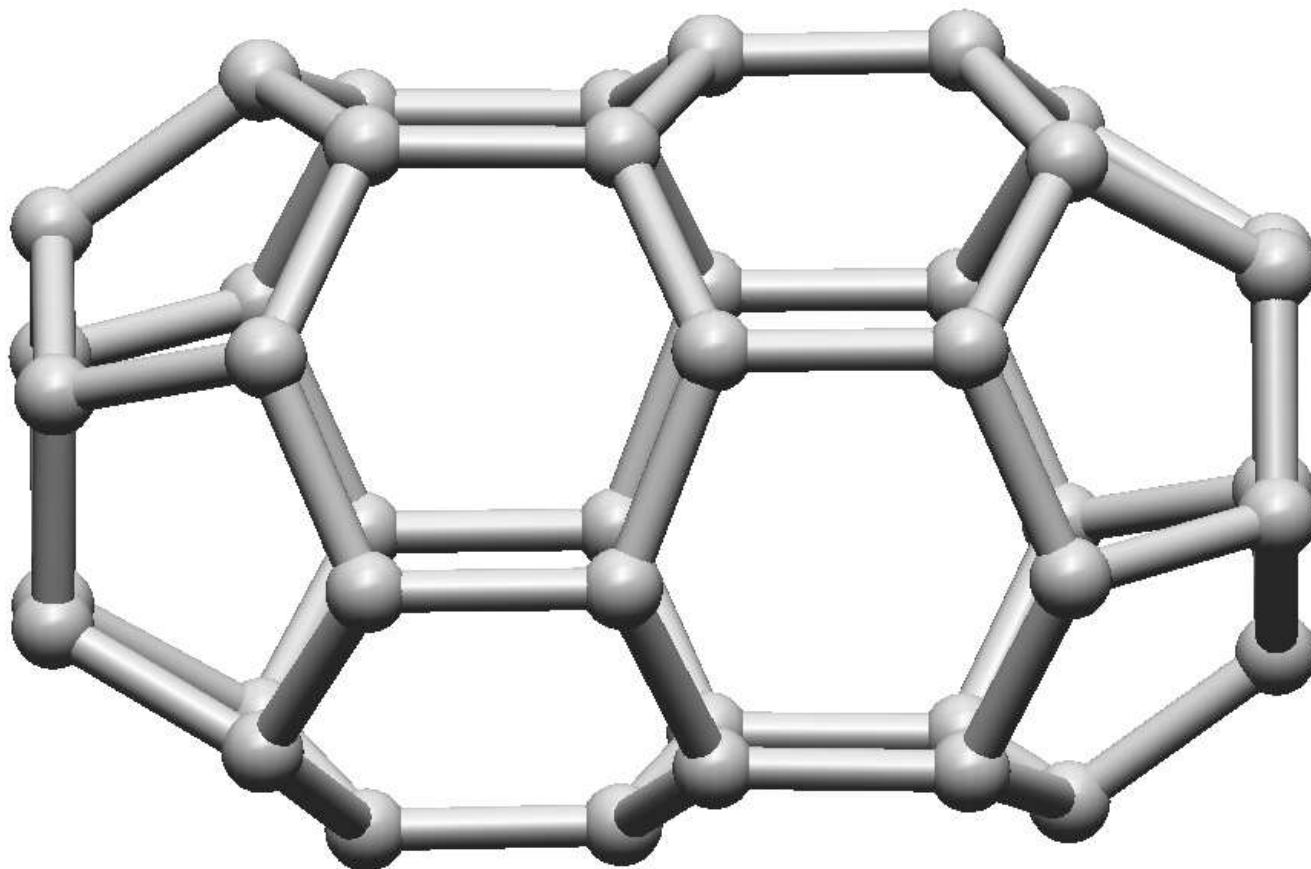
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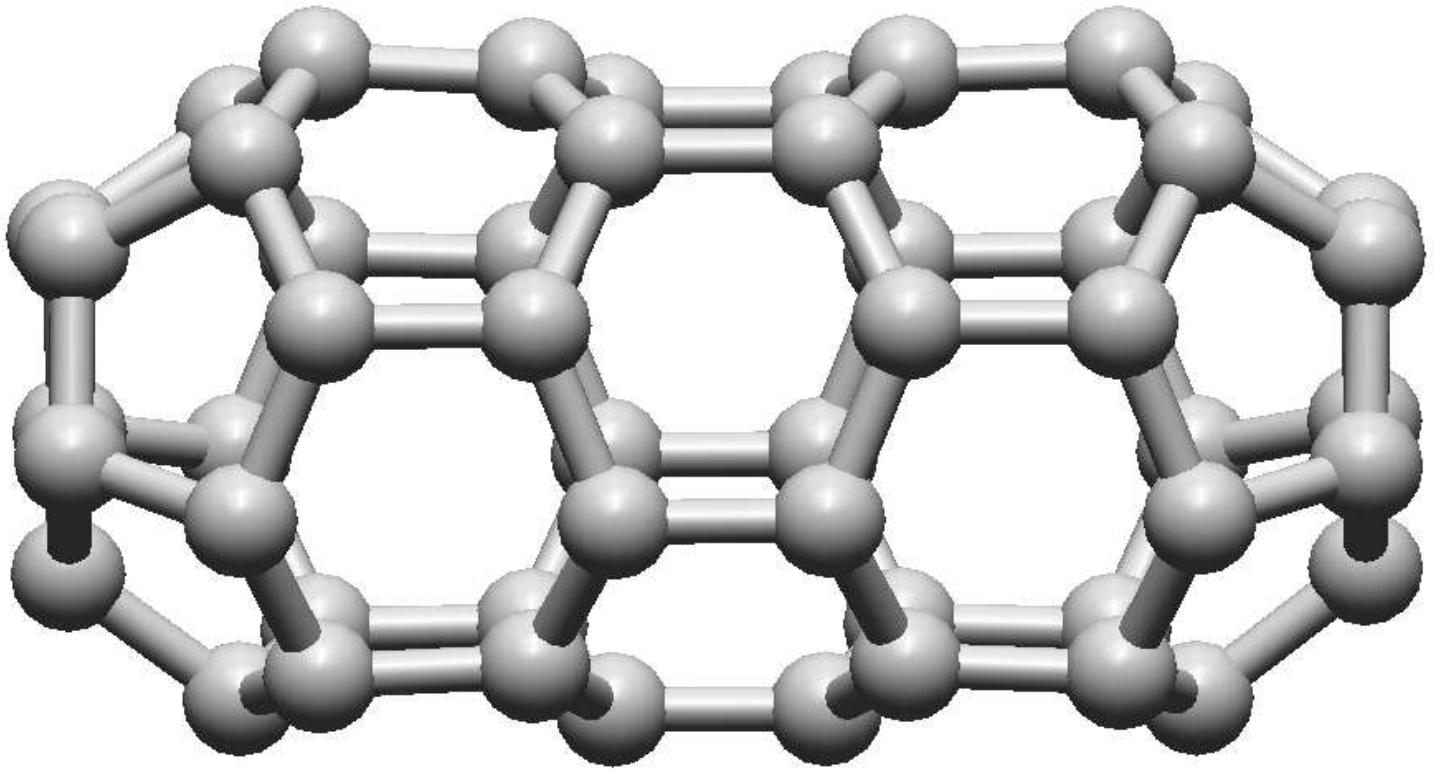
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# *C50* (No.1-D5h)

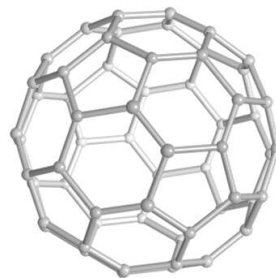
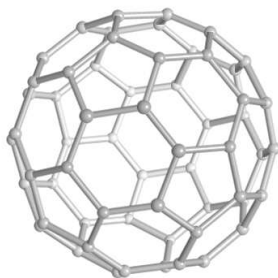
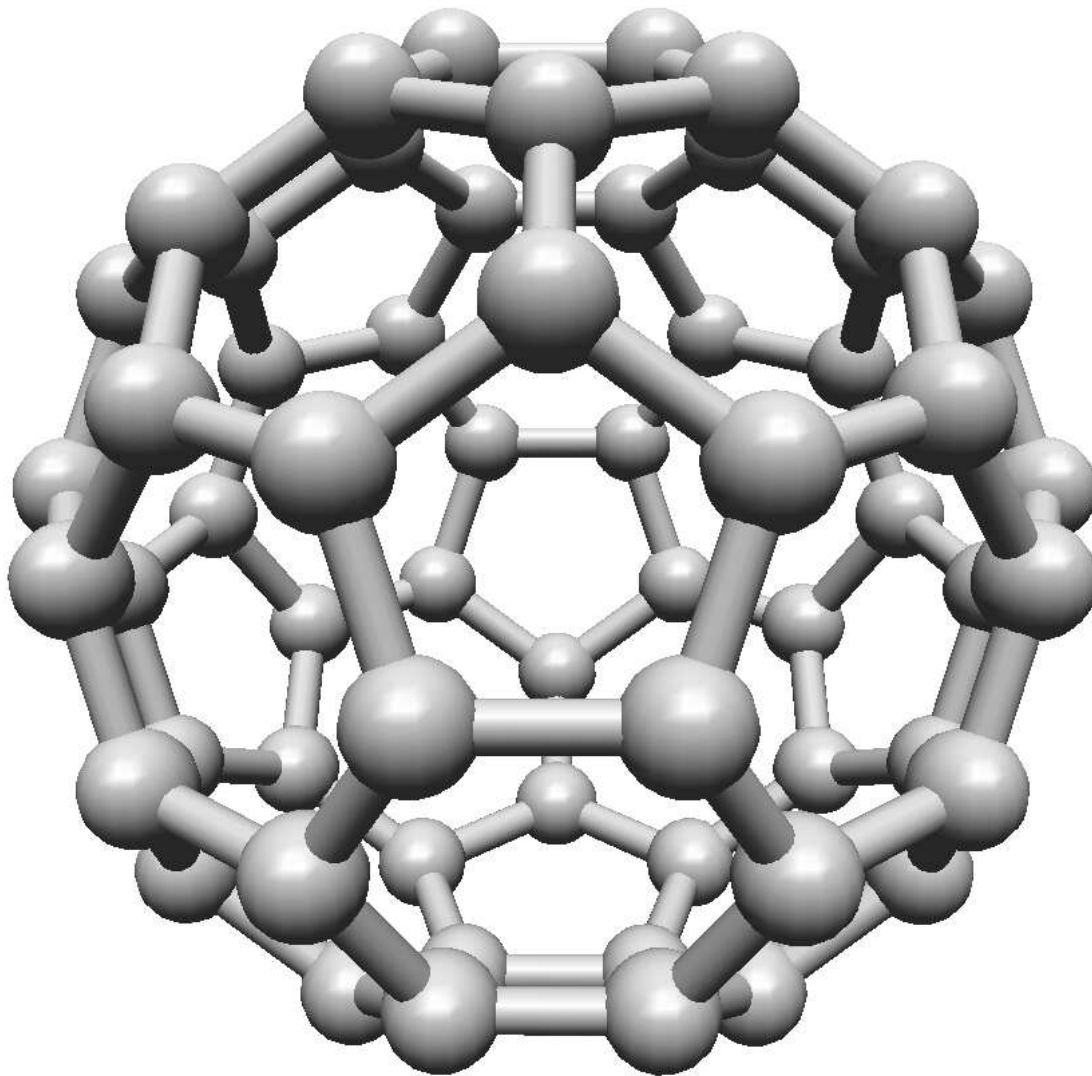
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# *C60* (Buckyball)

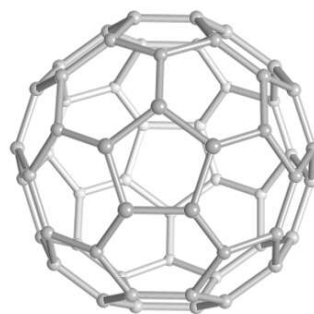
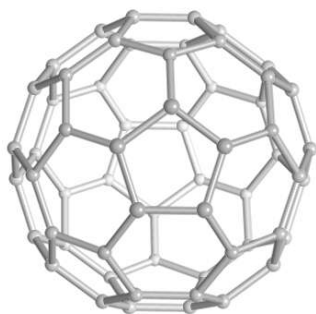
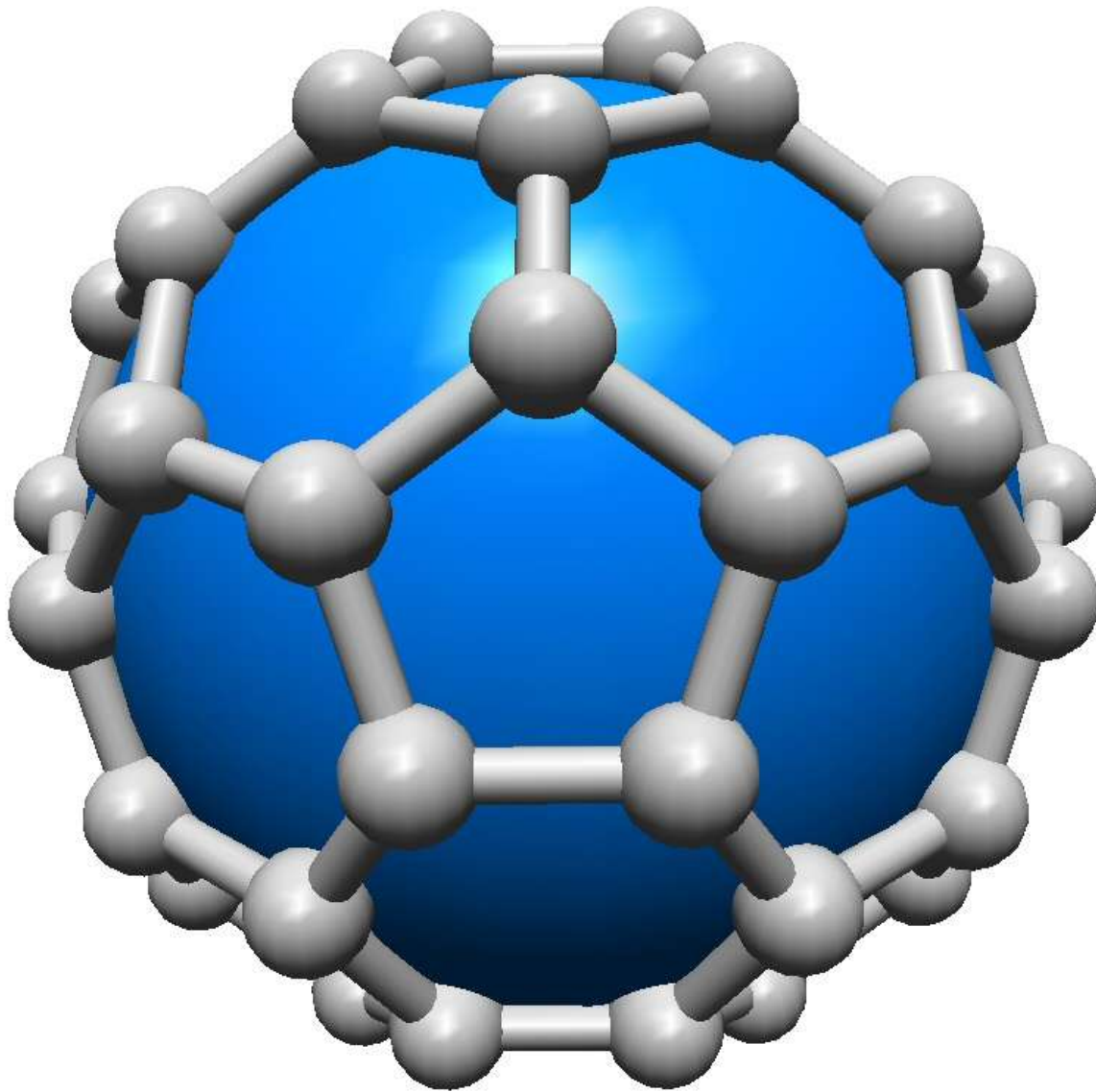
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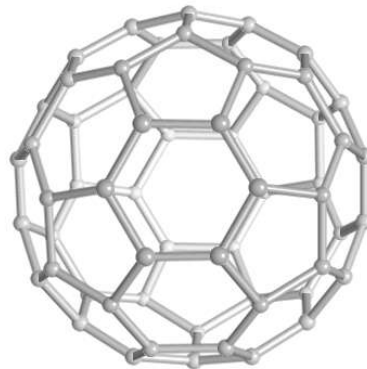
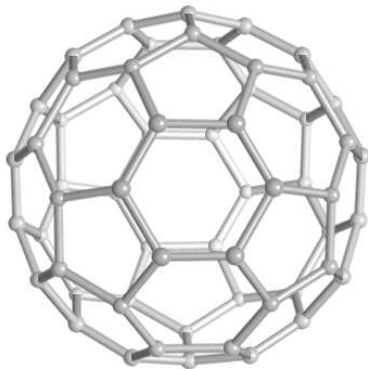
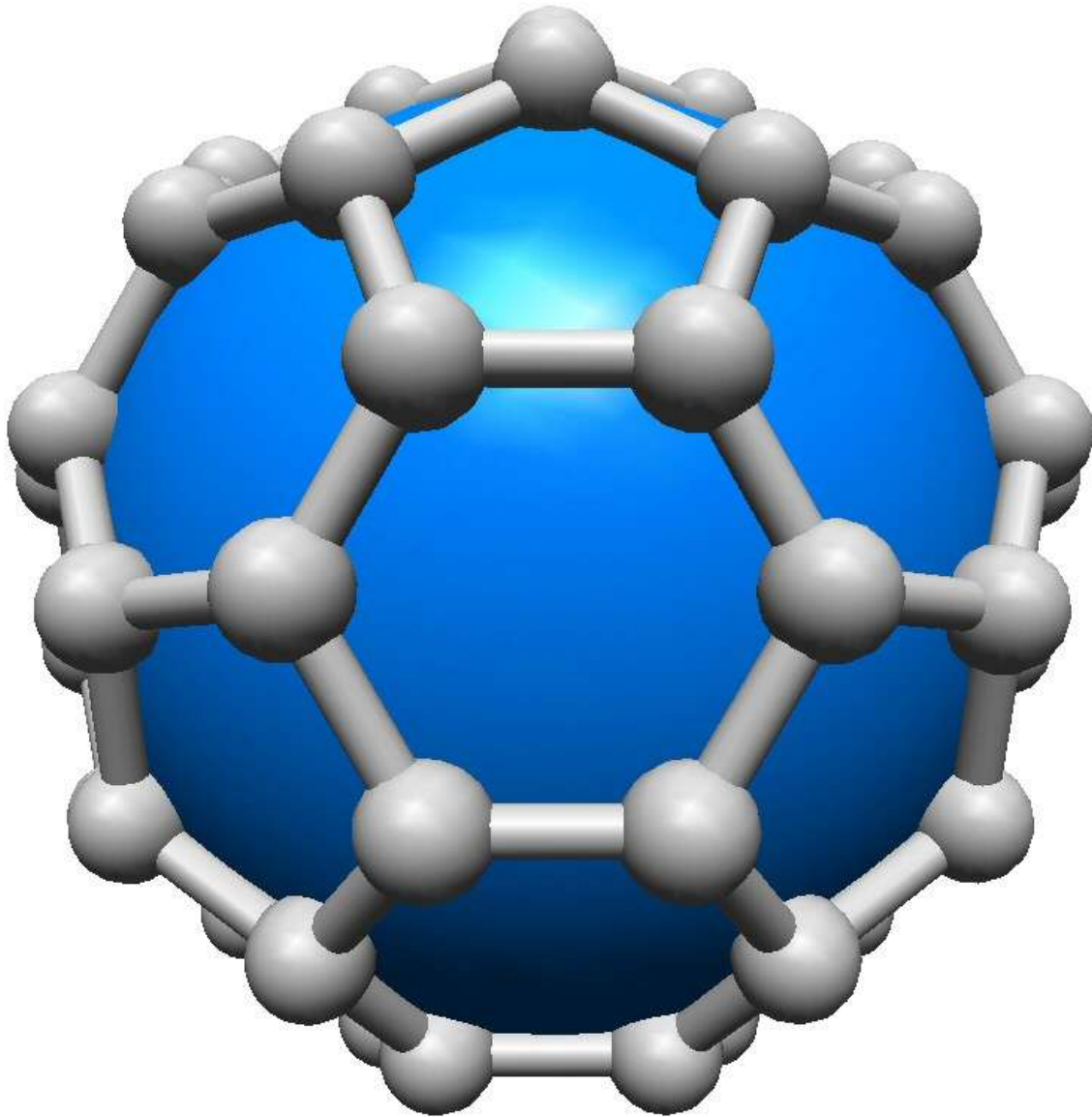
# *C60* (5-fold axis)

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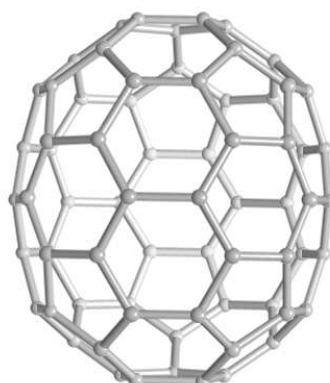
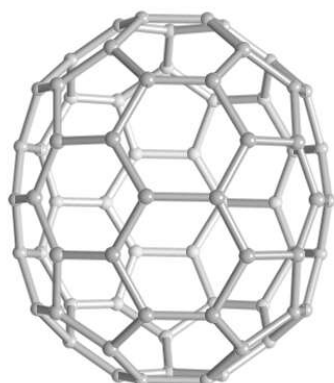
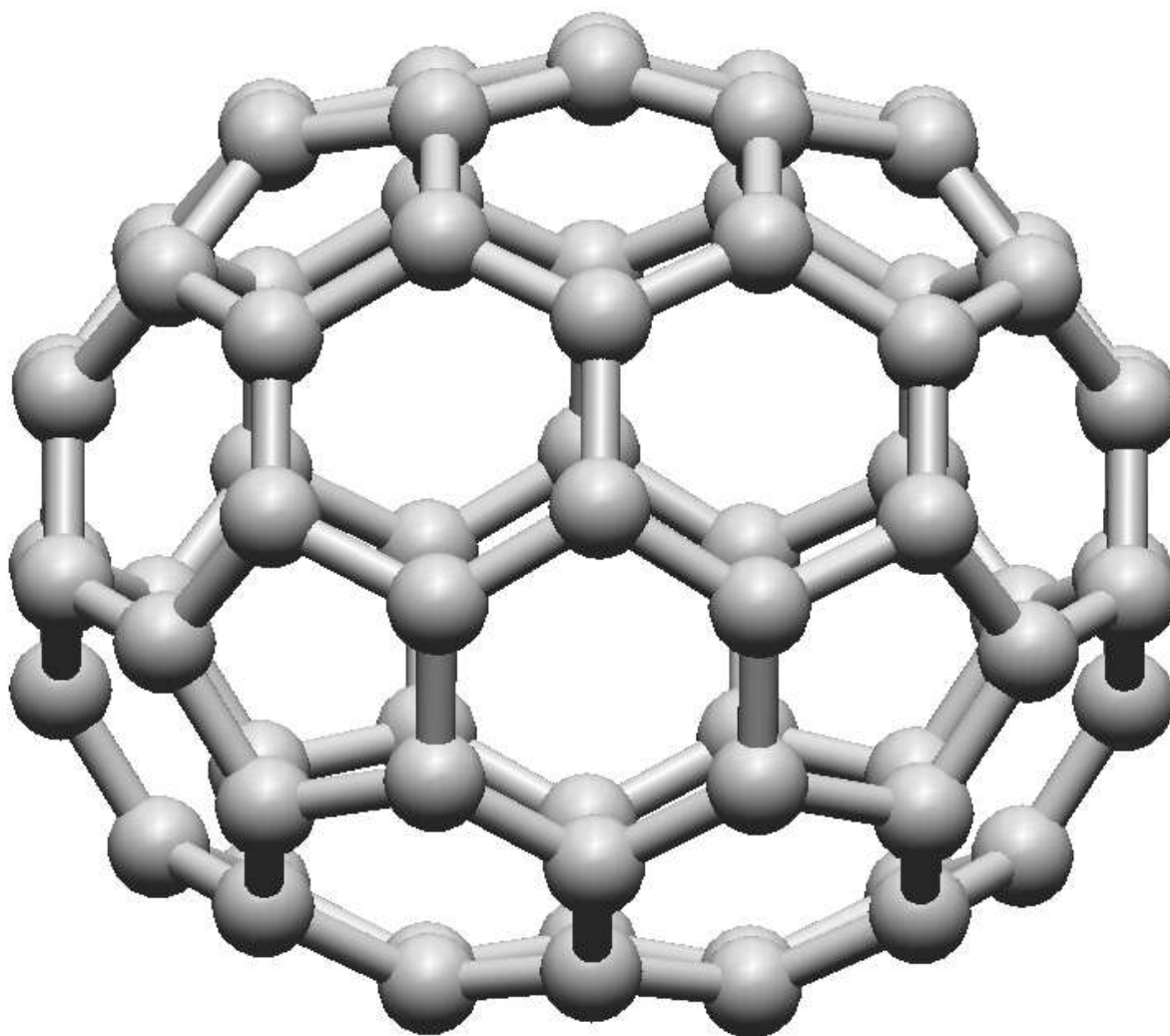
# ***C60*** (6-fold axis)

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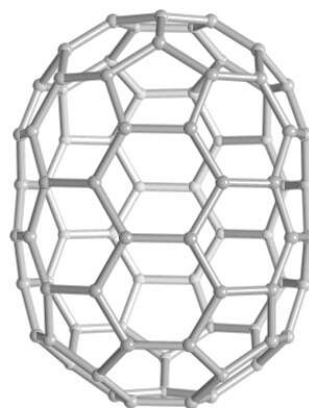
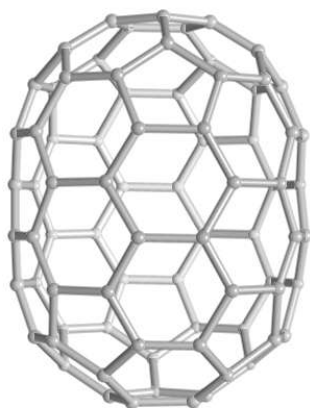
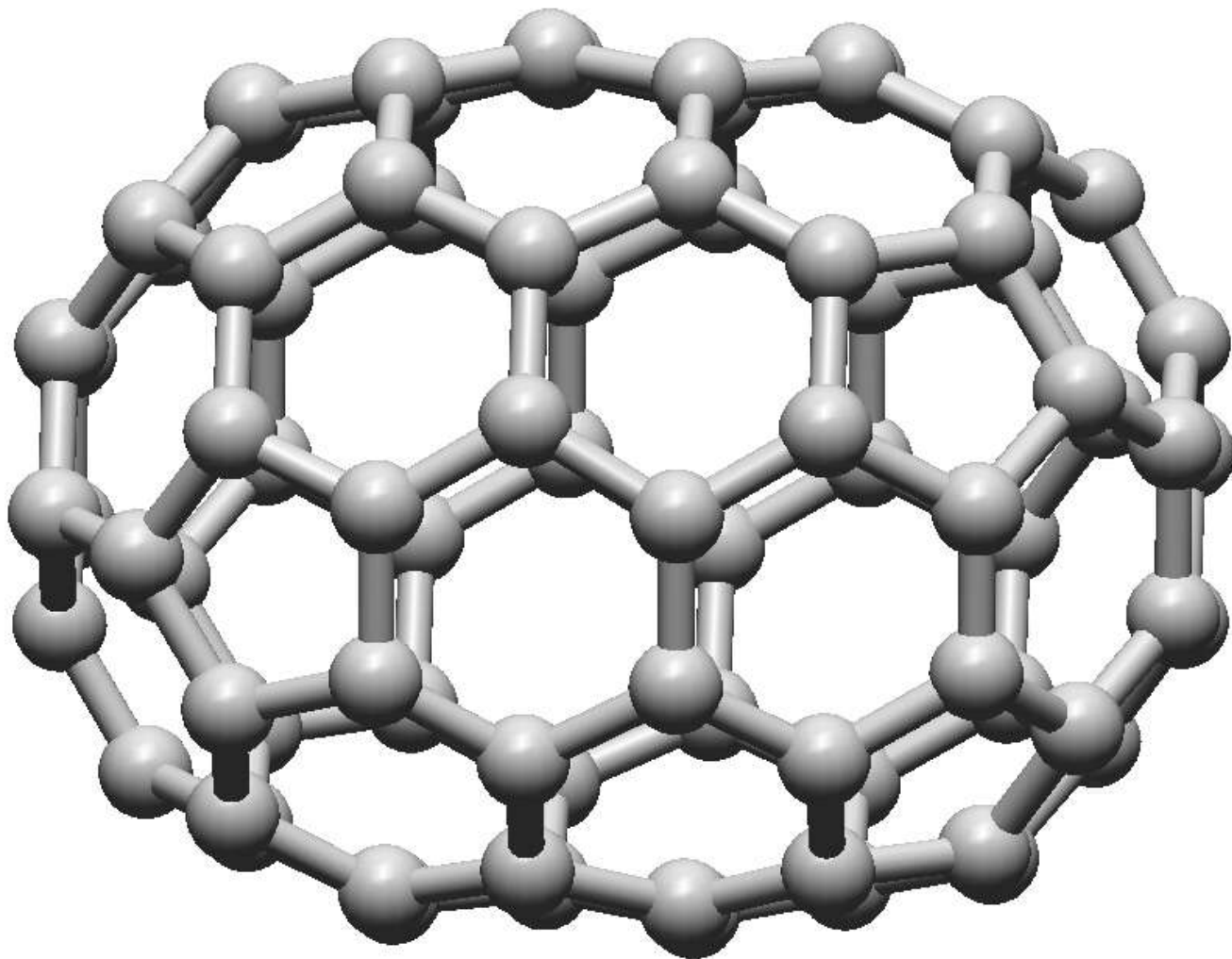
# *C70* (*C70-D5h*)

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# *C80* (No.1-D5d)

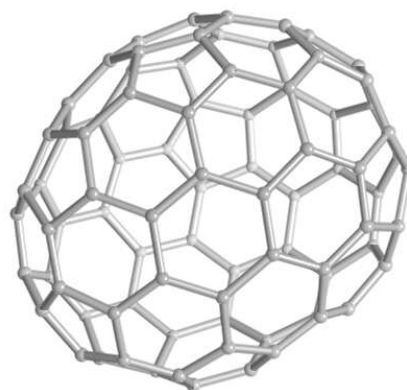
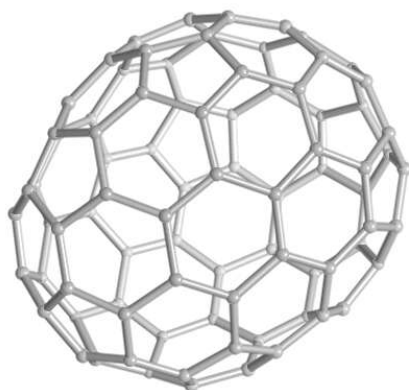
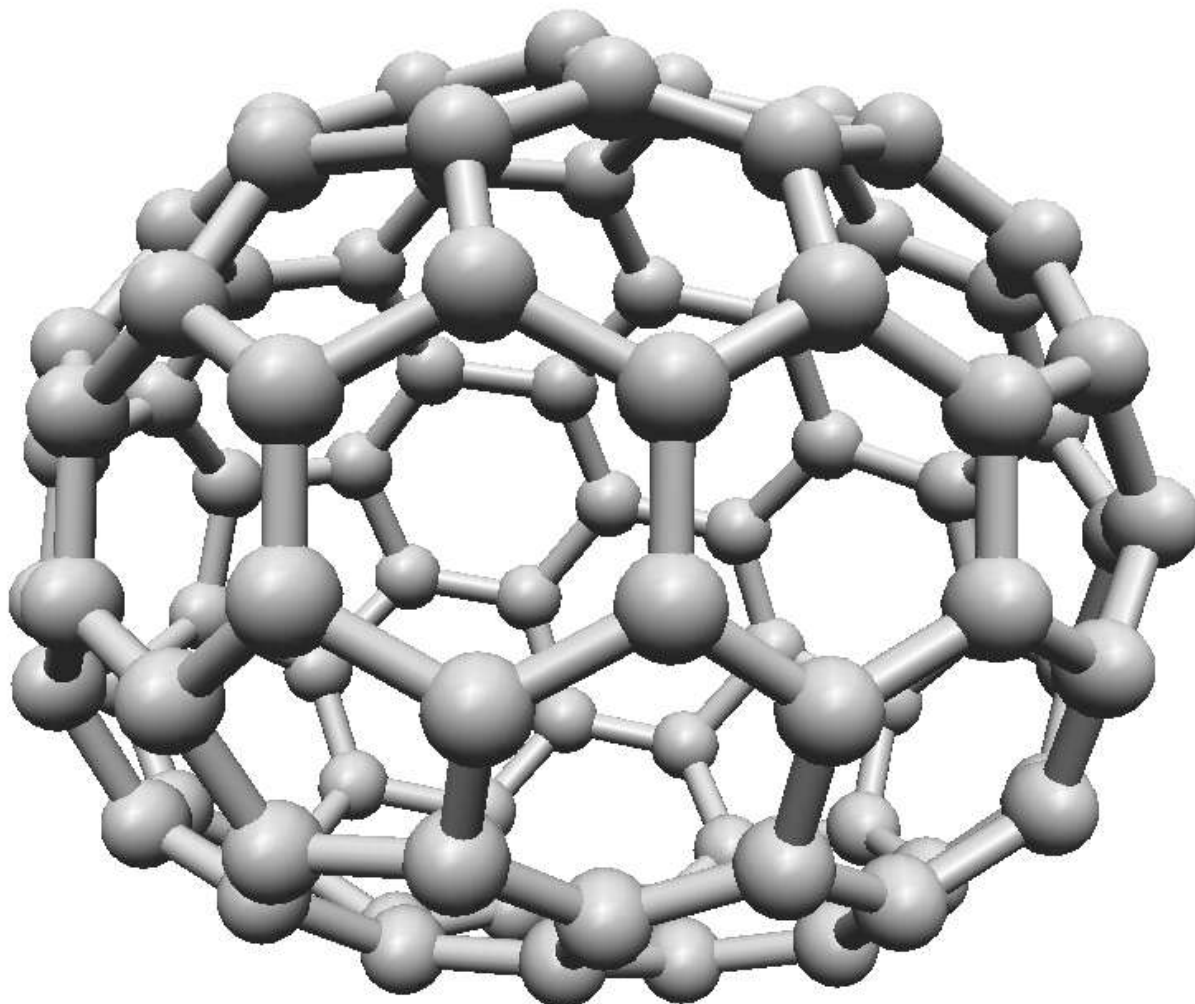
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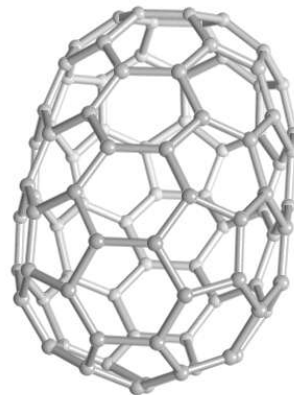
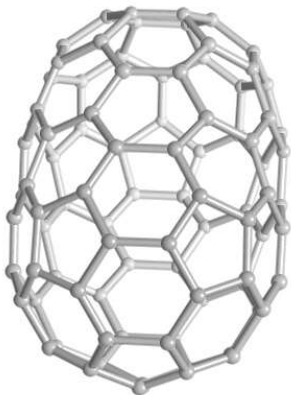
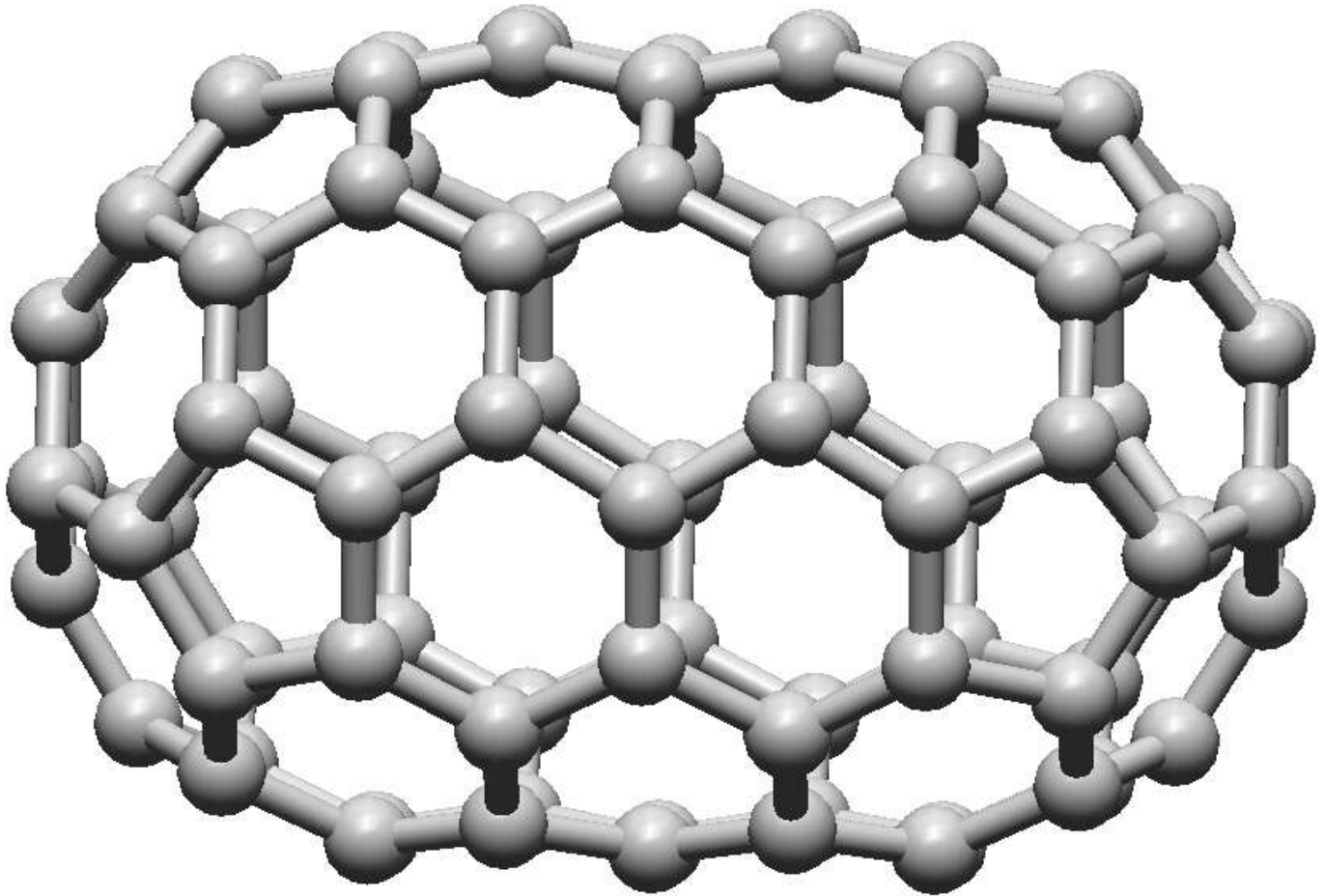
# C86 (No.1-C1)

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# *C90* (No.1-D5h)

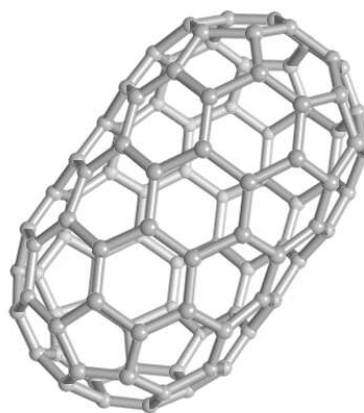
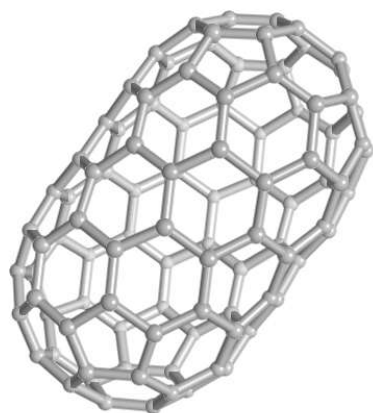
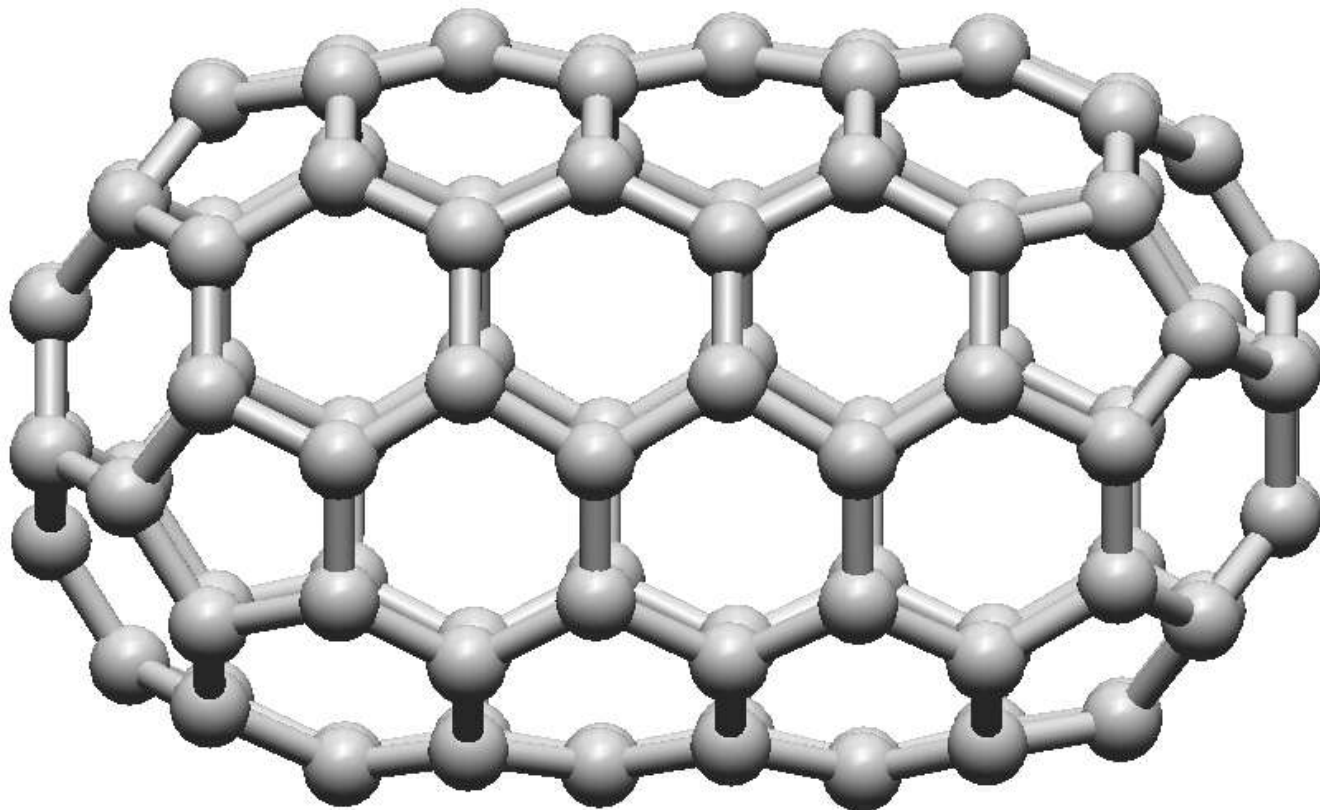
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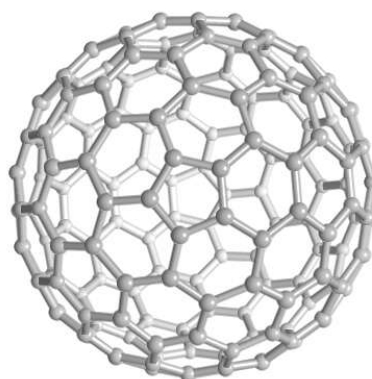
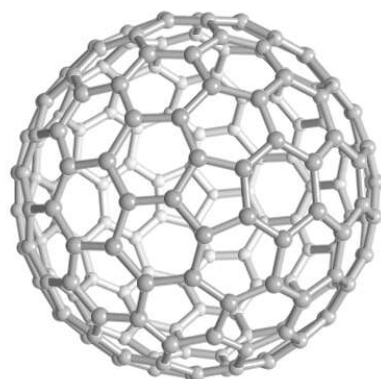
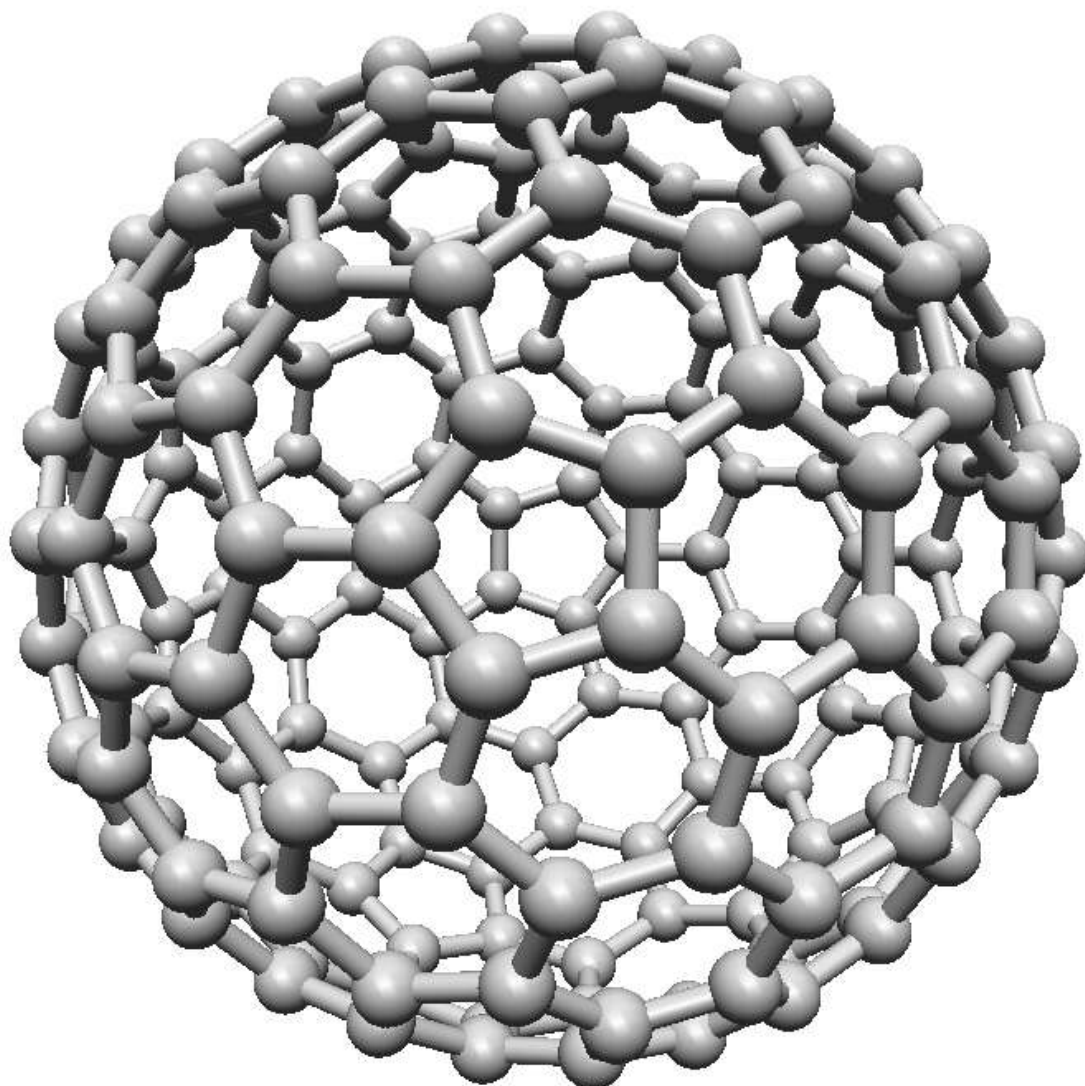
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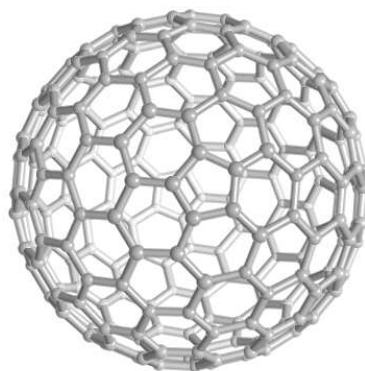
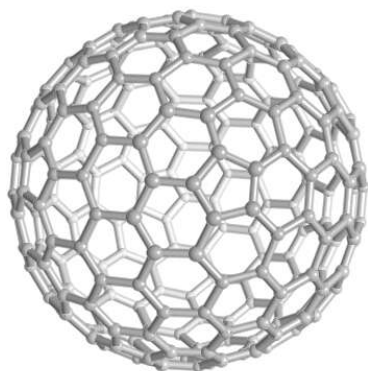
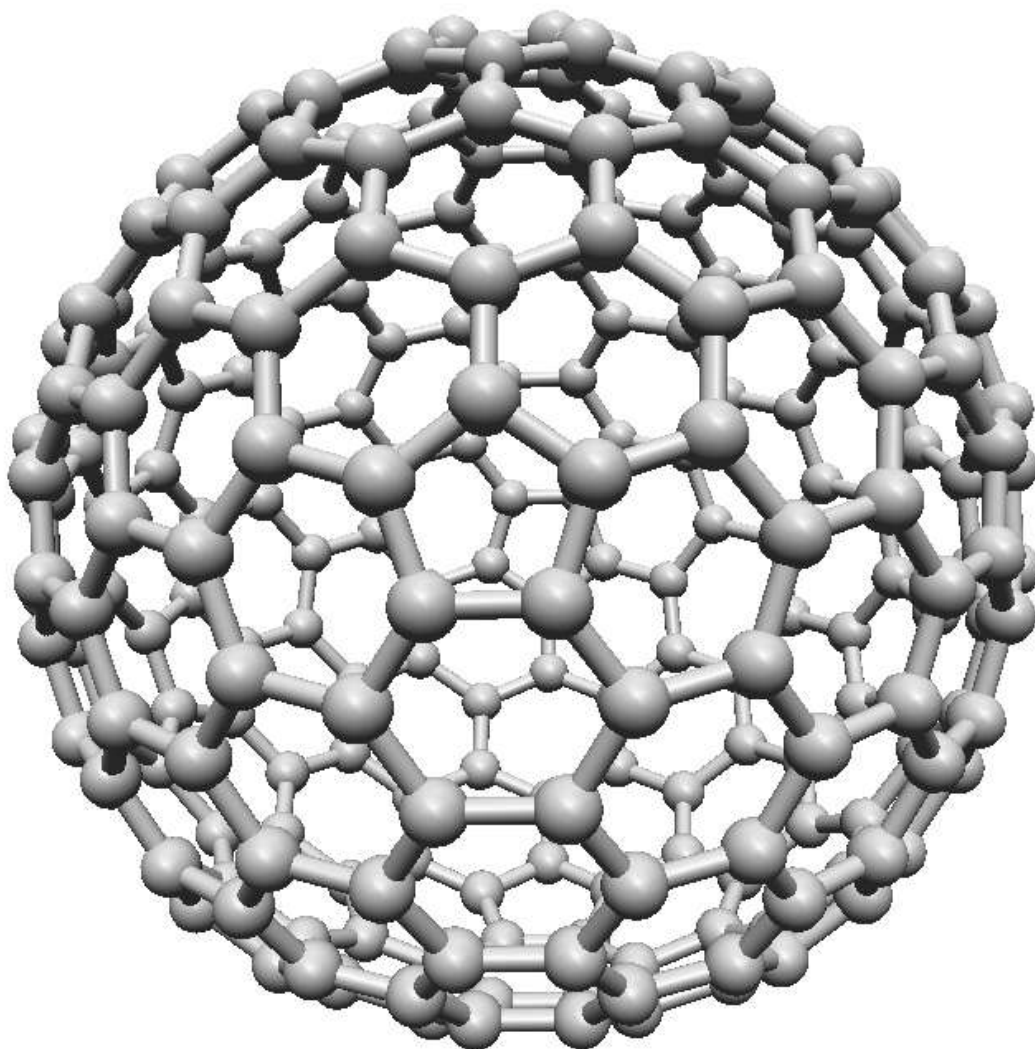
# *C180*

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# C240

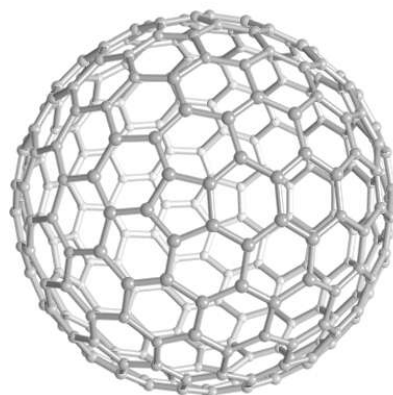
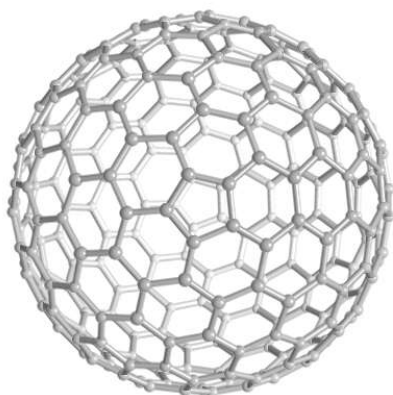
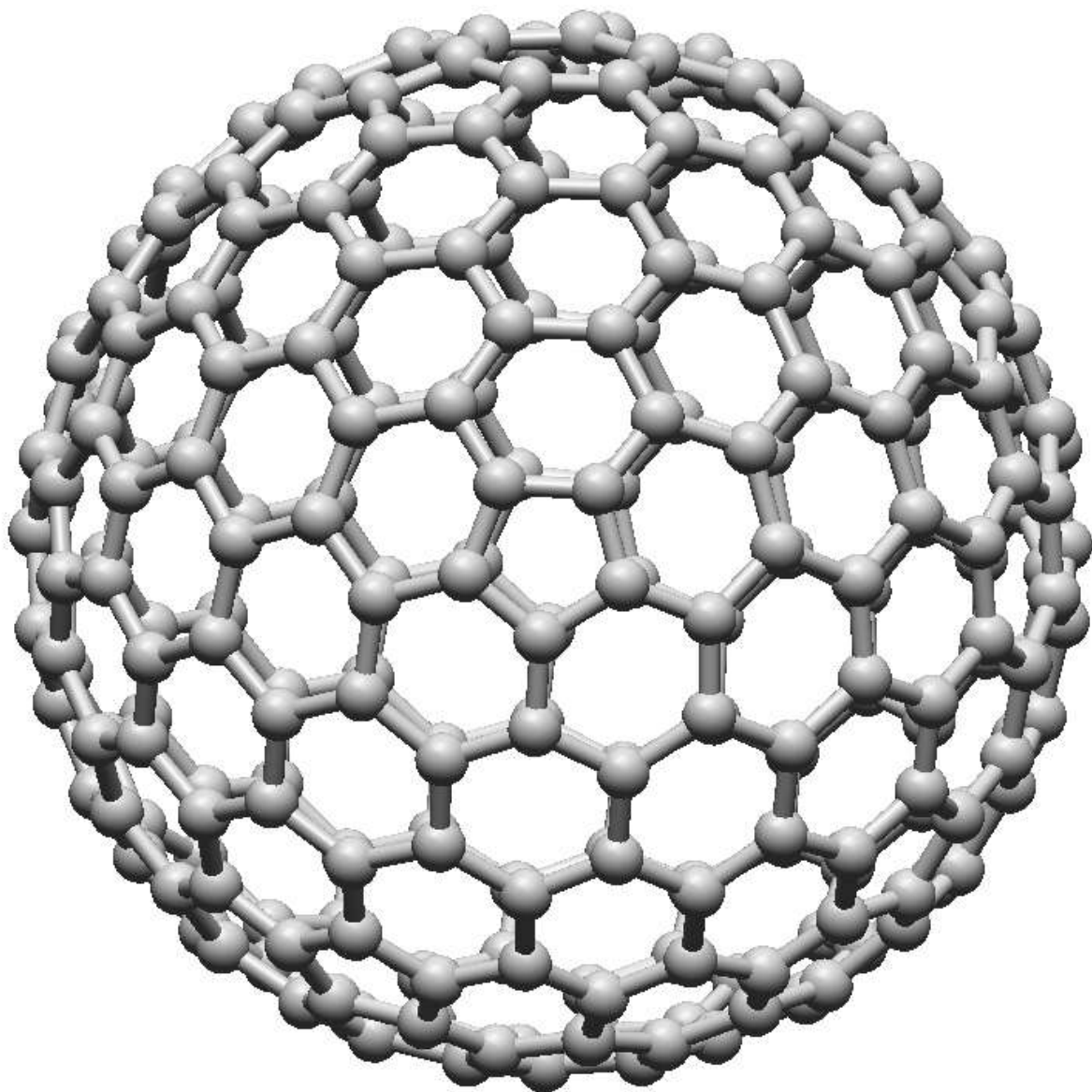
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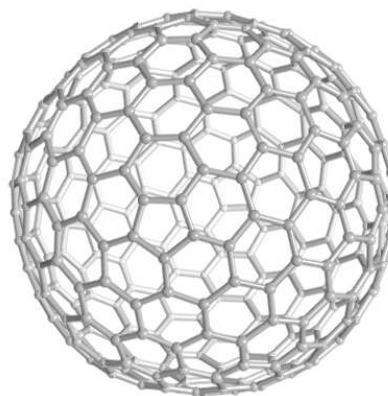
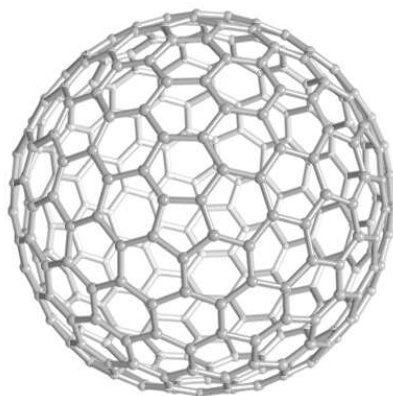
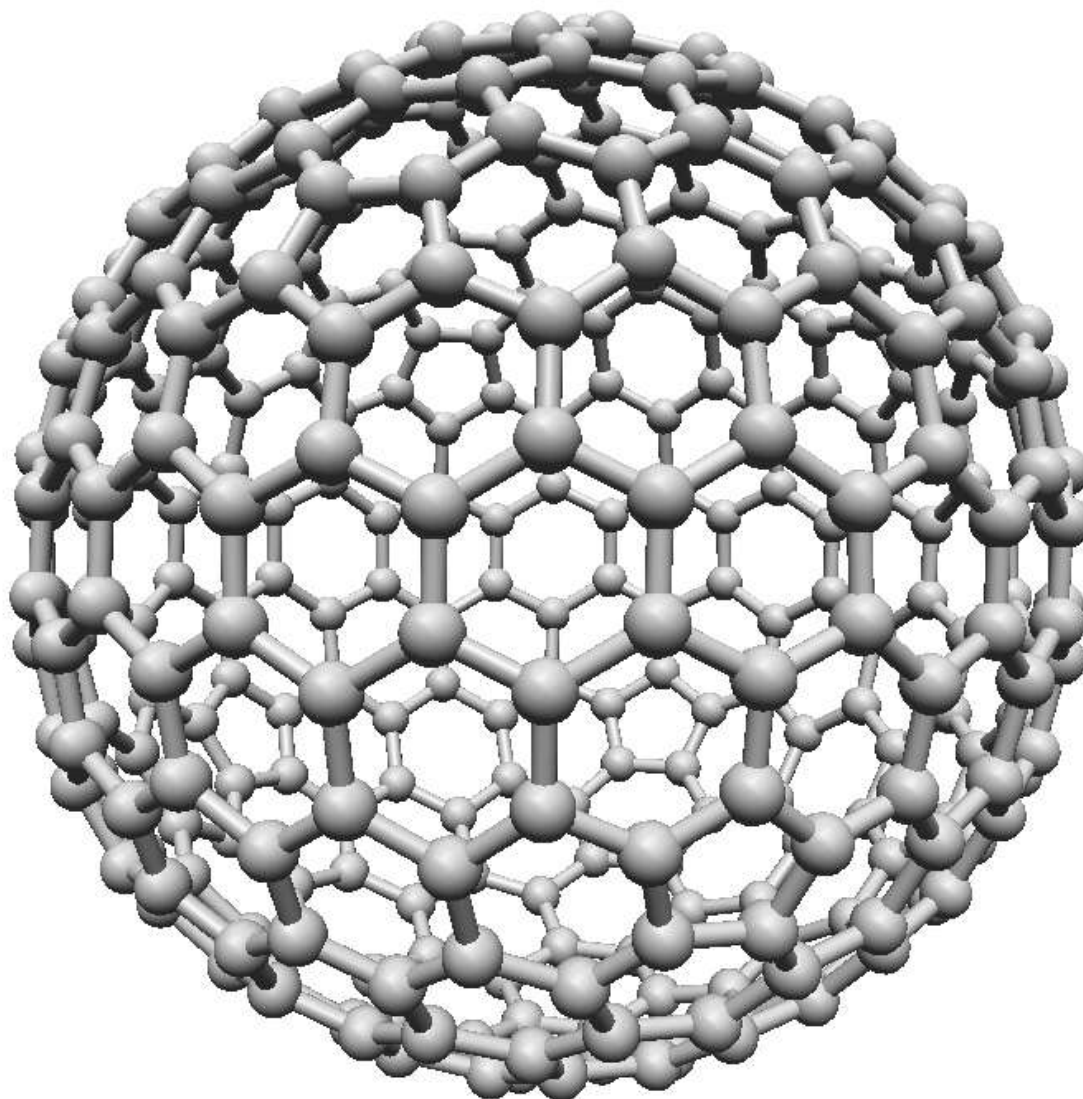
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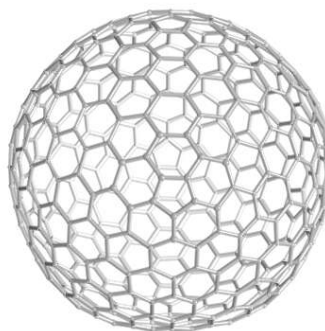
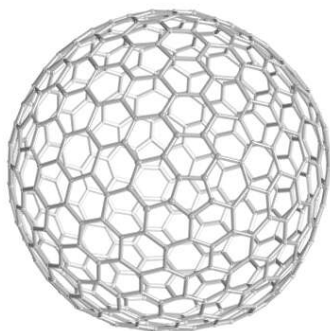
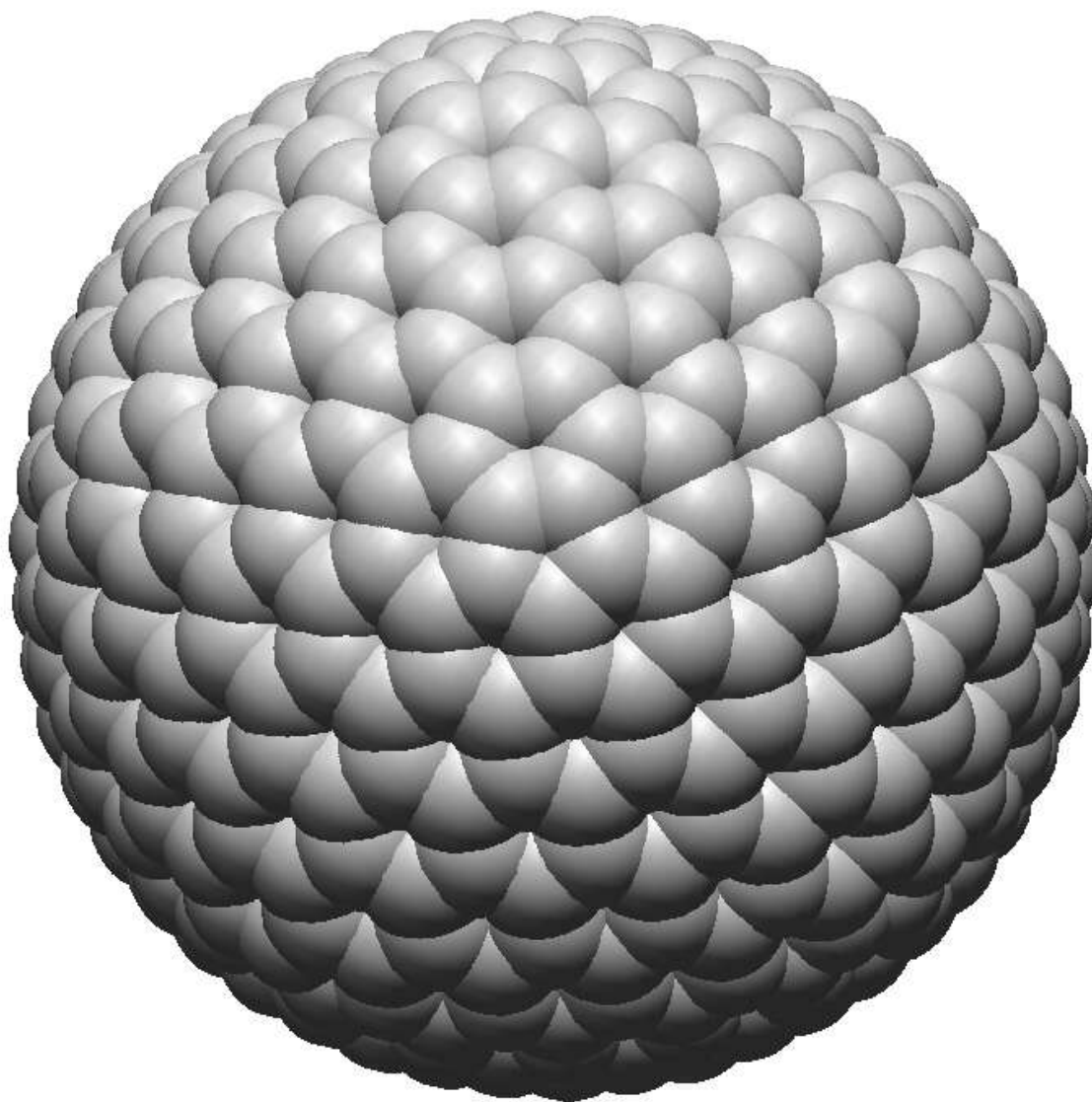
# C320

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# C500

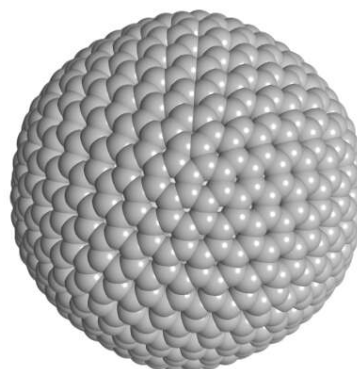
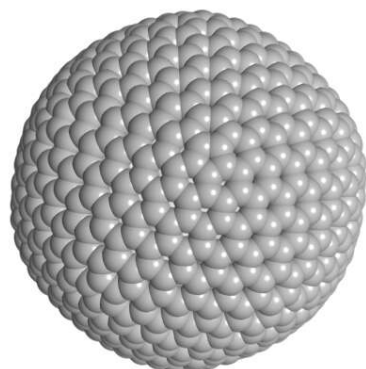
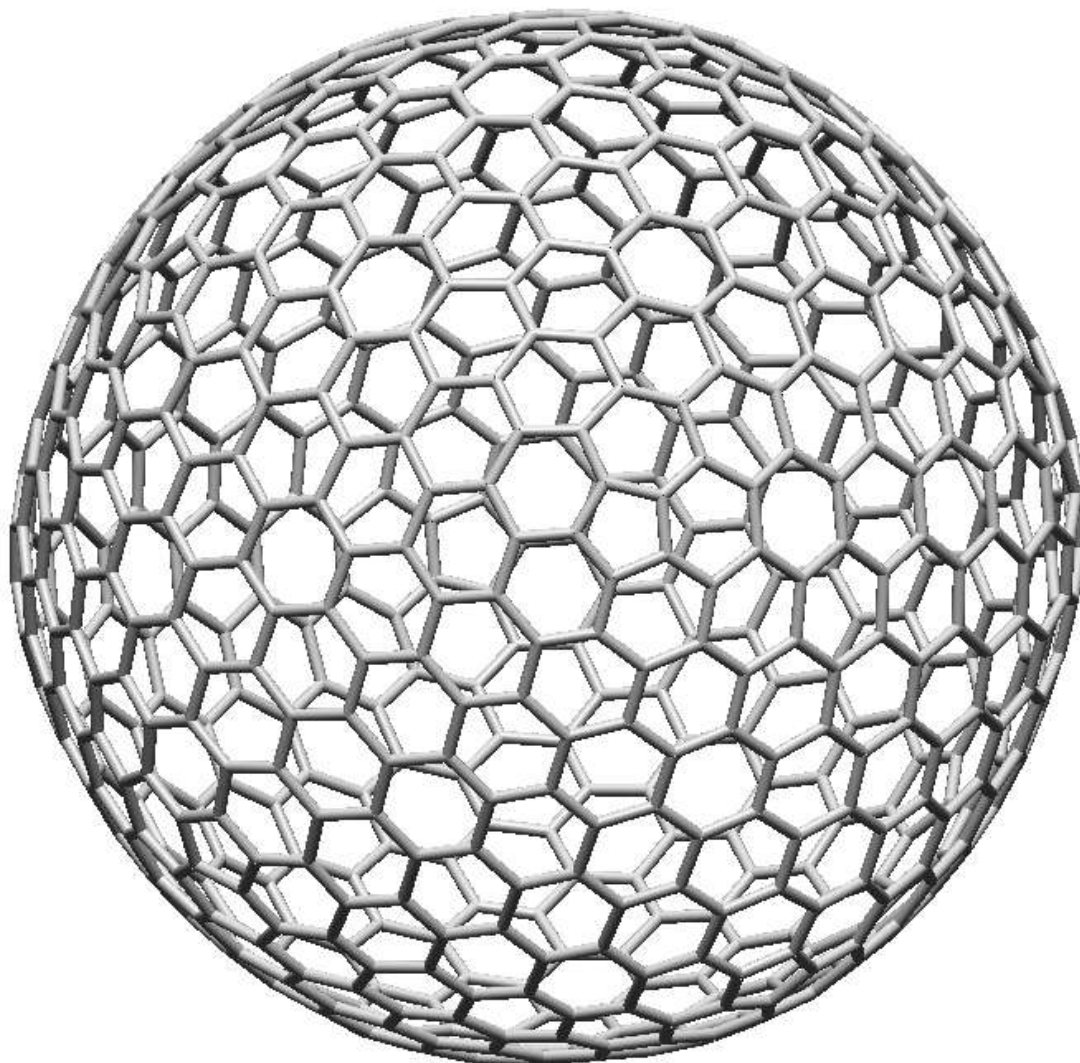
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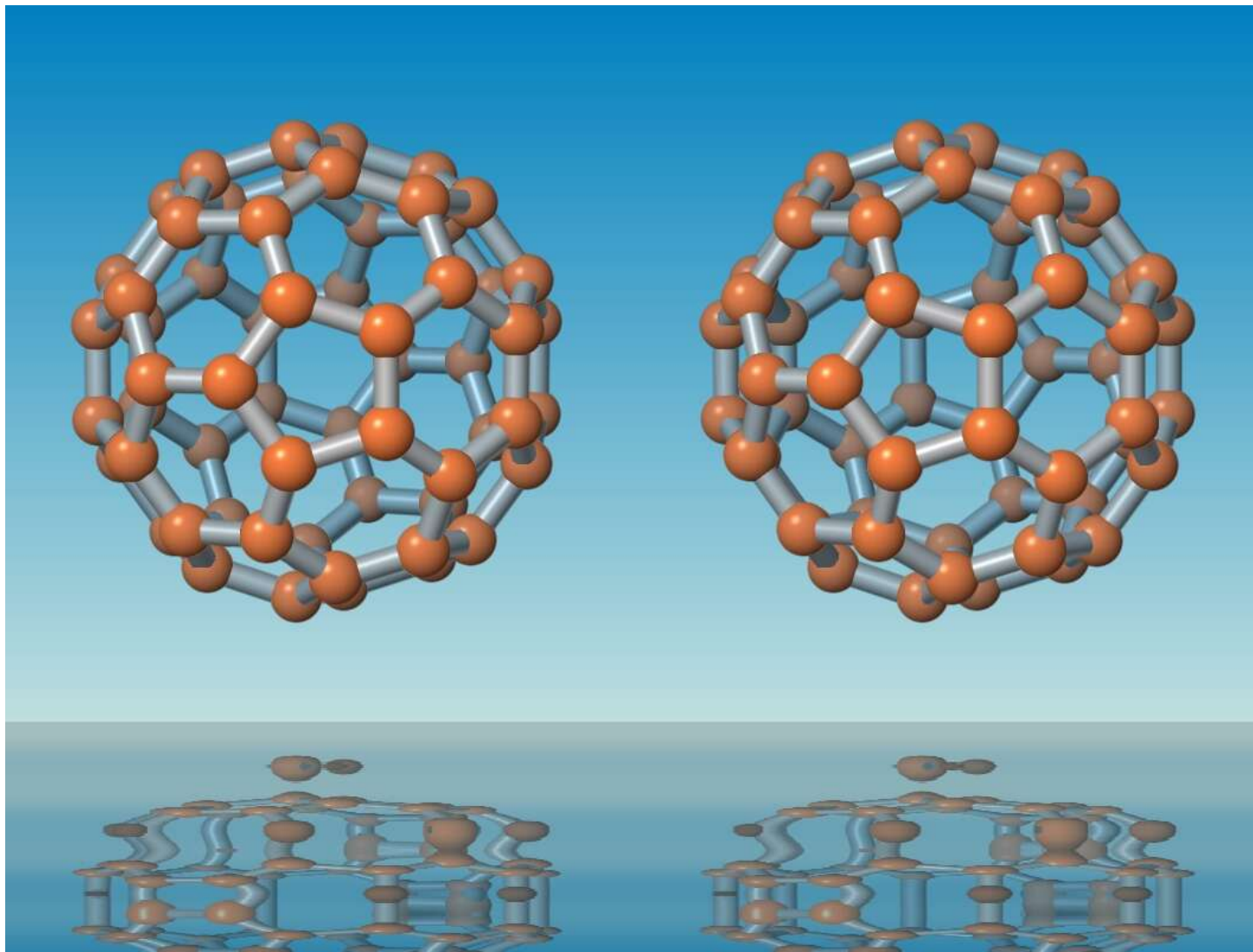
# C720

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# *C60 Stereo Pair*

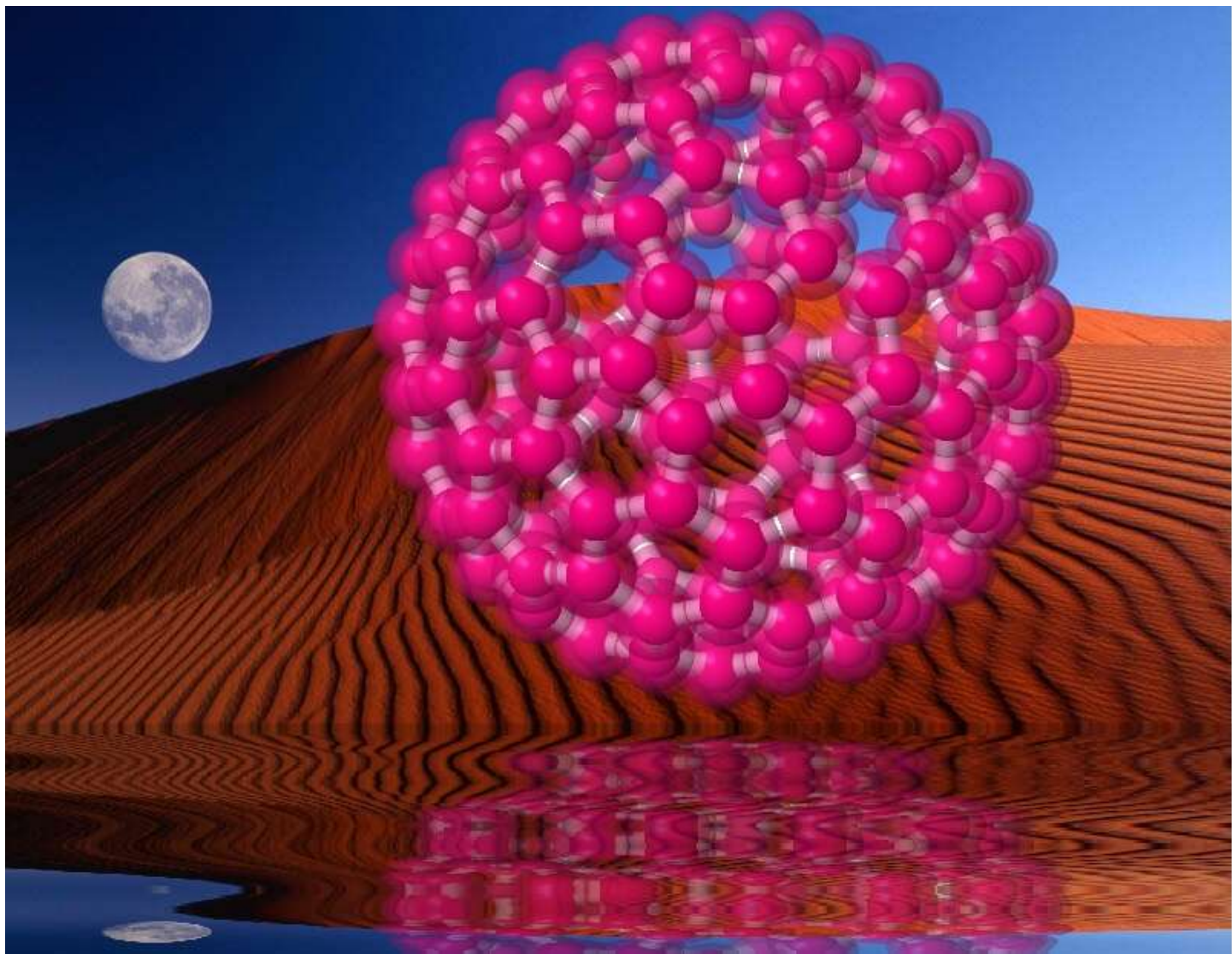
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This image was created with JPOWD by MDI ([www.materialsdata.com](http://www.materialsdata.com)).  
This lake effect is just one of ten image effects which are available in this software package.

# *C180*

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This image was created with JPOWD by MDI ([www.materialsdata.com](http://www.materialsdata.com)).  
The lake effect was combined with a background image.



# *Disclaimer*

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If you think you found mistakes in any of the images displayed in this volume please let me know so I can fix it. Please feel also free to contact me with suggestions for improvements and additions to these picture books. An older gallery of mine about fullerenes can be seen at [www.jcrystal.com/steffenweber/gallery/Fullerenes/Fullerenes.html](http://www.jcrystal.com/steffenweber/gallery/Fullerenes/Fullerenes.html)

You may contact me via email at: [\*steffenweber@comcast.net\*](mailto:steffenweber@comcast.net)

- This Volume Ends Here -