

Molecular Origami of V(CO)₆⁻

given information

| ElementNames | [(V) (C) (C) (C) (C) (C) (C)] | |
|--------------|---------------------------------|--|
| distance | 185.598 | V ¹ -C ⁶ |
| distance | 186.478 | V ¹ -C ⁴ |
| distance | 187.013 | V ¹ -C ³ |
| distance | 187.078 | V ¹ -C ⁵ |
| distance | 188.514 | V ¹ -C ² |
| distance | 189.260 | V ¹ -C ¹ |
| angle | 86.730 | C ⁶ -V ¹ -C ⁵ |
| | 255.9 | C ⁶ -C ⁵ |
| angle | 87.268 | C ⁶ -V ¹ -C ² |
| | 258.2 | C ⁶ -C ² |
| angle | 88.141 | C ⁵ -V ¹ -C ⁴ |
| | 259.8 | C ⁵ -C ⁴ |
| angle | 88.321 | C ⁴ -V ¹ -C ¹ |
| | 261.8 | C ⁴ -C ¹ |
| angle | 88.581 | C ³ -V ¹ -C ² |
| | 262.2 | C ³ -C ² |
| angle | 89.089 | C ² -V ¹ -C ¹ |
| | 265. | C ² -C ¹ |
| angle | 89.618 | C ⁵ -V ¹ -C ¹ |
| | 265.2 | C ⁵ -C ¹ |
| angle | 89.627 | C ⁴ -V ¹ -C ³ |
| | 263.2 | C ⁴ -C ³ |
| angle | 89.679 | C ⁶ -V ¹ -C ³ |
| | 262.7 | C ⁶ -C ³ |
| angle | 93.826 | C ⁵ -V ¹ -C ² |
| | 274.3 | C ⁵ -C ² |
| angle | 94.138 | C ³ -V ¹ -C ¹ |
| | 275.5 | C ³ -C ¹ |
| angle | 95.449 | C ⁶ -V ¹ -C ⁴ |
| | 275.3 | C ⁶ -C ⁴ |
| angle | 174.658 | C ⁶ -V ¹ -C ¹ |
| | 374.5 | C ⁶ -C ¹ |
| angle | 175.574 | C ⁵ -V ¹ -C ³ |
| | 373.8 | C ⁵ -C ³ |
| angle | 176.738 | C ⁴ -V ¹ -C ² |
| | 374.8 | C ⁴ -C ² |
| dopage | T | |
| AutoAlign | F | |

structure type: XABCDEF

!V1
C1
C2
C3
C4
C5
C6
V(CO)6^.

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scale 150,000,000 : 1
units: pm
offsetx -0.05 offsety 0.11
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The diagram shows the crystal structure of $V(CO)_6^+$ as a series of connected triangles. The central triangle is labeled with $150M_1$ and $V(CO)_6$. The vertices of the triangles are labeled with carbon (C) and vanadium (V) atoms, along with their respective bond lengths and angles. The structure is a fragment of a larger lattice, with the central triangle being the most prominent.

Key data points from the diagram:

- Central triangle labels: $150M_1$, $V(CO)_6$
- Carbon atoms: C-265, C-263, C-276, C-262, C-275, C-260, C-256, C-258, C-274, C-266, C-267, C-268, C-269, C-270, C-271, C-272, C-273, C-274, C-275, C-276, C-277, C-278, C-279, C-280, C-281, C-282, C-283, C-284, C-285, C-286, C-287, C-288, C-289, C-290, C-291, C-292, C-293, C-294, C-295, C-296, C-297, C-298, C-299, C-300, C-301, C-302, C-303, C-304, C-305, C-306, C-307, C-308, C-309, C-310, C-311, C-312, C-313, C-314, C-315, C-316, C-317, C-318, C-319, C-320, C-321, C-322, C-323, C-324, C-325, C-326, C-327, C-328, C-329, C-330, C-331, C-332, C-333, C-334, C-335, C-336, C-337, C-338, C-339, C-340, C-341, C-342, C-343, C-344, C-345, C-346, C-347, C-348, C-349, C-350, C-351, C-352, C-353, C-354, C-355, C-356, C-357, C-358, C-359, C-360, C-361, C-362, C-363, C-364, C-365, C-366, C-367, C-368, C-369, C-370, C-371, C-372, C-373, C-374, C-375, C-376, C-377, C-378, C-379, C-380, C-381, C-382, C-383, C-384, C-385, C-386, C-387, C-388, C-389, C-390, C-391, C-392, C-393, C-394, C-395, C-396, C-397, C-398, C-399, C-400, C-401, C-402, C-403, C-404, C-405, C-406, C-407, C-408, C-409, C-410, C-411, C-412, C-413, C-414, C-415, C-416, C-417, C-418, C-419, C-420, C-421, C-422, C-423, C-424, C-425, C-426, C-427, C-428, C-429, C-430, C-431, C-432, C-433, C-434, C-435, C-436, C-437, C-438, C-439, C-440, C-441, C-442, C-443, C-444, C-445, C-446, C-447, C-448, C-449, C-450, C-451, C-452, C-453, C-454, C-455, C-456, C-457, C-458, C-459, C-460, C-461, C-462, C-463, C-464, C-465, C-466, C-467, C-468, C-469, C-470, C-471, C-472, C-473, C-474, C-475, C-476, C-477, C-478, C-479, C-480, C-481, C-482, C-483, C-484, C-485, C-486, C-487, C-488, C-489, C-490, C-491, C-492, C-493, C-494, C-495, C-496, C-497, C-498, C-499, C-500, C-501, C-502, C-503, C-504, C-505, C-506, C-507, C-508, C-509, C-510, C-511, C-512, C-513, C-514, C-515, C-516, C-517, C-518, C-519, C-520, C-521, C-522, C-523, C-524, C-525, C-526, C-527, C-528, C-529, C-530, C-531, C-532, C-533, C-534, C-535, C-536, C-537, C-538, C-539, C-540, C-541, C-542, C-543, C-544, C-545, C-546, C-547, C-548, C-549, C-550, C-551, C-552, C-553, C-554, C-555, C-556, C-557, C-558, C-559, C-560, C-561, C-562, C-563, C-564, C-565, C-566, C-567, C-568, C-569, C-570, C-571, C-572, C-573, C-574, C-575, C-576, C-577, C-578, C-579, C-580, C-581, C-582, C-583, C-584, C-585, C-586, C-587, C-588, C-589, C-590, C-591, C-592, C-593, C-594, C-595, C-596, C-597, C-598, C-599, C-600, C-601, C-602, C-603, C-604, C-605, C-606, C-607, C-608, C-609, C-610, C-611, C-612, C-613, C-614, C-615, C-616, C-617, C-618, C-619, C-620, C-621, C-622, C-623, C-624, C-625, C-626, C-627, C-628, C-629, C-630, C-631, C-632, C-633, C-634, C-635, C-636, C-637, C-638, C-639, C-640, C-641, C-642, C-643, C-644, C-645, C-646, C-647, C-648, C-649, C-650, C-651, C-652, C-653, C-654, C-655, C-656, C-657, C-658, C-659, C-660, C-661, C-662, C-663, C-664, C-665, C-666, C-667, C-668, C-669, C-670, C-671, C-672, C-673, C-674, C-675, C-676, C-677, C-678, C-679, C-680, C-681, C-682, C-683, C-684, C-685, C-686, C-687, C-688, C-689, C-690, C-691, C-692, C-693, C-694, C-695, C-696, C-697, C-698, C-699, C-700, C-701, C-702, C-703, C-704, C-705, C-706, C-707, C-708, C-709, C-710, C-711, C-712, C-713, C-714, C-715, C-716, C-717, C-718, C-719, C-720, C-721, C-722, C-723, C-724, C-725, C-726, C-727, C-728, C-729, C-730, C-731, C-732, C-733, C-734, C-735, C-736, C-737, C-738, C-739, C-740, C-741, C-742, C-743, C-744, C-745, C-746, C-747, C-748, C-749, C-750, C-751, C-752, C-753, C-754, C-755, C-756, C-757, C-758, C-759, C-760, C-761, C-762, C-763, C-764, C-765, C-766, C-767, C-768, C-769, C-770, C-771, C-772, C-773, C-774, C-775, C-776, C-777, C-778, C-779, C-780, C-781, C-782, C-783, C-784, C-785, C-786, C-787, C-788, C-789, C-790, C-791, C-792, C-793, C-794, C-795, C-796, C-797, C-798, C-799, C-800, C-801, C-802, C-803, C-804, C-805, C-806, C-807, C-808, C-809, C-810, C-811, C-812, C-813, C-814, C-815, C-816, C-817, C-818, C-819, C-820, C-821, C-822, C-823, C-824, C-825, C-826, C-827, C-828, C-829, C-830, C-831, C-832, C-833, C-834, C-835, C-836, C-837, C-838, C-839, C-840, C-841, C-842, C-843, C-844, C-845, C-846, C-847, C-848, C-849, C-850, C-851, C-852, C-853, C-854, C-855, C-856, C-857, C-858, C-859, C-860, C-861, C-862, C-863, C-864, C-865, C-866, C-867, C-868, C-869, C-870, C-871, C-872, C-873, C-874, C-875, C-876, C-877, C-878, C-879, C-880, C-881, C-882, C-883, C-884, C-885, C-886, C-887, C-888, C-889, C-890, C-891, C-892, C-893, C-894, C-895, C-896, C-897, C-898, C-899, C-900, C-901, C-902, C-903, C-904, C-905, C-906, C-907, C-908, C-909,

actual size: 333 691

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