

Molecular Origami of V(CO)6⁻

given information

ElementNames	[(V) (C) (C) (C) (C) (C) (C)]	
distance	193.288	V ¹ -C ⁴
distance	193.734	V ¹ -C ¹
distance	193.772	V ¹ -C ²
distance	194.333	V ¹ -C ⁵
distance	194.511	V ¹ -C ³
distance	196.356	V ¹ -C ⁶
angle	82.798	C ⁵ -V ¹ -C ²
	256.7	C ⁵ -C ²
angle	86.504	C ⁴ -V ¹ -C ³
	265.7	C ⁴ -C ³
angle	87.302	C ³ -V ¹ -C ¹
	268.	C ³ -C ¹
angle	87.424	C ⁶ -V ¹ -C ⁴
	269.3	C ⁶ -C ⁴
angle	88.335	C ⁶ -V ¹ -C ¹
	271.8	C ⁶ -C ¹
angle	89.593	C ⁴ -V ¹ -C ²
	272.7	C ⁴ -C ²
angle	90.274	C ⁵ -V ¹ -C ¹
	275.1	C ⁵ -C ¹
angle	91.659	C ⁶ -V ¹ -C ⁵
	280.2	C ⁶ -C ⁵
angle	92.114	C ³ -V ¹ -C ²
	279.6	C ³ -C ²
angle	93.027	C ⁶ -V ¹ -C ²
	283.1	C ⁶ -C ²
angle	95.047	C ⁵ -V ¹ -C ³
	286.8	C ⁵ -C ³
angle	97.358	C ⁴ -V ¹ -C ¹
	290.7	C ⁴ -C ¹
angle	172.013	C ⁶ -V ¹ -C ³
	389.9	C ⁶ -C ³
angle	172.280	C ⁵ -V ¹ -C ⁴
	386.7	C ⁵ -C ⁴
angle	172.973	C ² -V ¹ -C ¹
	386.8	C ² -C ¹
dopage	T	
AutoAlign	F	

structure type: XABCDEF

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

```
scale 150,000,000 : 1
units: pm
offsetx -0.02 offsety -0.01
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The diagram shows the crystal structure of $V(CO)_6^+$ as a series of connected octahedra. The central octahedron is labeled with $V(CO)_6$ and $150M \pm 1$. The octahedra are connected at their vertices, forming a chain-like structure. The atoms are labeled with their element symbols and numbers, such as $C-273$, $C-272$, $C-271$, $C-270$, $C-269$, $C-268$, $C-267$, $C-266$, $C-265$, $C-264$, $C-263$, $C-262$, $C-261$, $C-260$, $C-259$, $C-258$, $C-257$, $C-256$, $C-255$, $C-254$, $C-253$, $C-252$, $C-251$, $C-250$, $C-249$, $C-248$, $C-247$, $C-246$, $C-245$, $C-244$, $C-243$, $C-242$, $C-241$, $C-240$, $C-239$, $C-238$, $C-237$, $C-236$, $C-235$, $C-234$, $C-233$, $C-232$, $C-231$, $C-230$, $C-229$, $C-228$, $C-227$, $C-226$, $C-225$, $C-224$, $C-223$, $C-222$, $C-221$, $C-220$, $C-219$, $C-218$, $C-217$, $C-216$, $C-215$, $C-214$, $C-213$, $C-212$, $C-211$, $C-210$, $C-209$, $C-208$, $C-207$, $C-206$, $C-205$, $C-204$, $C-203$, $C-202$, $C-201$, $C-200$, $C-199$, $C-198$, $C-197$, $C-196$, $C-195$, $C-194$, $C-193$, $C-192$, $C-191$, $C-190$, $C-189$, $C-188$, $C-187$, $C-186$, $C-185$, $C-184$, $C-183$, $C-182$, $C-181$, $C-180$, $C-179$, $C-178$, $C-177$, $C-176$, $C-175$, $C-174$, $C-173$, $C-172$, $C-171$, $C-170$, $C-169$, $C-168$, $C-167$, $C-166$, $C-165$, $C-164$, $C-163$, $C-162$, $C-161$, $C-160$, $C-159$, $C-158$, $C-157$, $C-156$, $C-155$, $C-154$, $C-153$, $C-152$, $C-151$, $C-150$, $C-149$, $C-148$, $C-147$, $C-146$, $C-145$, $C-144$, $C-143$, $C-142$, $C-141$, $C-140$, $C-139$, $C-138$, $C-137$, $C-136$, $C-135$, $C-134$, $C-133$, $C-132$, $C-131$, $C-130$, $C-129$, $C-128$, $C-127$, $C-126$, $C-125$, $C-124$, $C-123$, $C-122$, $C-121$, $C-120$, $C-119$, $C-118$, $C-117$, $C-116$, $C-115$, $C-114$, $C-113$, $C-112$, $C-111$, $C-110$, $C-109$, $C-108$, $C-107$, $C-106$, $C-105$, $C-104$, $C-103$, $C-102$, $C-101$, $C-100$, $C-99$, $C-98$, $C-97$, $C-96$, $C-95$, $C-94$, $C-93$, $C-92$, $C-91$, $C-90$, $C-89$, $C-88$, $C-87$, $C-86$, $C-85$, $C-84$, $C-83$, $C-82$, $C-81$, $C-80$, $C-79$, $C-78$, $C-77$, $C-76$, $C-75$, $C-74$, $C-73$, $C-72$, $C-71$, $C-70$, $C-69$, $C-68$, $C-67$, $C-66$, $C-65$, $C-64$, $C-63$, $C-62$, $C-61$, $C-60$, $C-59$, $C-58$, $C-57$, $C-56$, $C-55$, $C-54$, $C-53$, $C-52$, $C-51$, $C-50$, $C-49$, $C-48$, $C-47$, $C-46$, $C-45$, $C-44$, $C-43$, $C-42$, $C-41$, $C-40$, $C-39$, $C-38$, $C-37$, $C-36$, $C-35$, $C-34$, $C-33$, $C-32$, $C-31$, $C-30$, $C-29$, $C-28$, $C-27$, $C-26$, $C-25$, $C-24$, $C-23$, $C-22$, $C-21$, $C-20$, $C-19$, $C-18$, $C-17$, $C-16$, $C-15$, $C-14$, $C-13$, $C-12$, $C-11$, $C-10$, $C-9$, $C-8$, $C-7$, $C-6$, $C-5$, $C-4$, $C-3$, $C-2$, $C-1$. The octahedra are connected at their vertices, forming a chain-like structure. The atoms are labeled with their element symbols and numbers, such as $C-273$, $C-272$, $C-271$, $C-270$, $C-269$, $C-268$, $C-267$, $C-266$, $C-265$, $C-264$, $C-263$, $C-262$, $C-261$, $C-260$, $C-259$, $C-258$, $C-257$, $C-256$, $C-255$, $C-254$, $C-253$, $C-252$, $C-251$, $C-250$, $C-249$, $C-248$, $C-247$, $C-246$, $C-245$, $C-244$, $C-243$, $C-242$, $C-241$, $C-240$, $C-239$, $C-238$, $C-237$, $C-236$, $C-235$, $C-234$, $C-233$, $C-232$, $C-231$, $C-230$, $C-229$, $C-228$, $C-227$, $C-226$, $C-225$, $C-224$, $C-223$, $C-222$, $C-221$, $C-220$, $C-219$, $C-218$, $C-217$, $C-216$, $C-215$, $C-214$, $C-213$, $C-212$, $C-211$, $C-210$, $C-209$, $C-208$, $C-207$, $C-206$, $C-205$, $C-204$, $C-203$, $C-202$, $C-201$, $C-200$, $C-199$, $C-198$, $C-197$, $C-196$, $C-195$, $C-194$, $C-193$, $C-192$, $C-191$, $C-190$, $C-189$, $C-188$, $C-187$, $C-186$, $C-185$, $C-184$, $C-183$, $C-182$, $C-181$, $C-180$, $C-179$, $C-178$, $C-177$, $C-176$, $C-175$, $C-174$, $C-173$, $C-172$, $C-171$, $C-170$, $C-169$, $C-168$, $C-167$, $C-166$, $C-165$, $C-164$, $C-163$, $C-162$, $C-161$, $C-160$, $C-159$, $C-158$, $C-157$, $C-156$, $C-155$, $C-154$, $C-153$, $C-152$, $C-151$, $C-150$, $C-149$, $C-148$, $C-147$, $C-146$, $C-145$, $C-144$, $C-143$, $C-142$, $C-141$, <

actual size: 342 703

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