Supplementary Information Table 3 Crystallographic data for sulfoxides **17** to **19, 23** to **25, 29** and **30**.

Compound	**17**	**18**	**19**	**R*R*-23**	**R*R*-24**	**R*S*-25**	**R*S*-28**	**R*S*-29**	**R*R*-30**
Formula	$C_{15}H_{16}O_3S$	$C_{13}H_{10}F_2OS$	$C_{13}H_{11}BrOS$	$C_{14}H_{14}OS$	$C_{14}H_{12}F_2OS$	$C_{16}H_{18}O_3S$	$C_{14}H_{12}F_2OS$	$C_{16}H_{18}O_3S$	$C_{16}H_{18}O_3S$
Formula Weight	276.34	252.27	295.19	230.31	266.30	290.36	266.30	290.36	290.36
T/K	180(2)	100(2)	180(2)	120(2)	120(2)	123(2)	180(2)	100(2)	293(2)
Crystal System	Monoclinic	Orthorhombic	Orthorhombic	Monoclinic	Monoclinic	Monoclinic	Monoclinic	Triclinic	Orthorhombic
Space Group	*Pc*	*Pca*2$_1$	*Pca*2$_1$	*C*2/*c*	*P*2$_1$/*c*	*Pn*	*P*2$_1$/*c*	$P\bar{1}$	*Pca*2$_1$
a/Å	15.4234(11)	8.1909(9)	8.2638(2)	28.2961(6)	15.5607(3)	8.5839(6)	13.5661(5)	7.1117(12)	12.4822(15)
b/Å	5.4410(4)	5.4433(5)	5.42770(10)	5.75060(10)	5.81098(11)	5.5077(3)	5.7383(2)	8.5497(7)	8.0394(9)
c/Å	8.1642(5)	24.948(2)	27.4202(9)	15.7264(3)	14.3987(3)	15.7646(11)	15.7552(7)	23.495(2)	14.9907(9)
α/°	90	90	90	90	90	90	90	89.756(7)	90
β/°	105.124(2)	90	90	112.1590(10)	107.8650(10)	104.481(7)	93.6250(10)	89.579(10)	90
γ/°	90	90	90	90	90	90	90	89.428(10)	90
V/Å^3	661.40(8)	1112.3(2)	1229.89(6)	2369.99(8)	1239.19(4)	721.63(8)	1224.03(8)	1428.5(3)	1504.3(3)
Z	2	4	4	8	4	2	4	4	4
ρ_{calc}/gcm^{-3}	1.388	1.506	1.594	1.291	1.427	1.336	1.445	1.350	1.282
μ/mm^{-1}	0.246	0.296	3.487	0.248	2.433	2.032	0.273	0.231	0.219
2θ max/°	54.18	56.80	49.98	54.92	136.26	135.36	54.94	60.28	50.94
Total reflections	5584	7201	6583	2936	8951	6211	8959	21334	3012
Unique reflections	2873	2747	1873	2712	2200	2330	2796	8198	2800
Refls I>2σ(I)	2753	2661	1563	2407	2005	2257	2240	7513	1783
R_{int}	0.0198	0.0210	0.0694	0.0270	0.0702	0.0384	0.0451	0.0116	0.0531
Parameters	174	154	145	146	165	185	164	367	184
R_1 [F, I>2σ(I)]	0.0349	0.0312	0.0539	0.0311	0.0394	0.0314	0.0418	0.0364	0.0522
wR_2 (F^2, all data)	0.0922	0.0827	0.1312	0.0846	0.1088	0.0838	0.1113	0.0876	0.1320
Flack	0.06(7)	0.03(6)	-0.019(18)	-	-	0.392(16)	-	-	0.07(13)
Hooft [a]	0.11(3)	0.03(2)	-0.024(8)	-	-	0.385(7)[b]	-	-	0.11(7)

[a] as implemented in PLATON
[b] racemic twin