

---

## **Supplementary Material**

### **Tissue-specific bioaccumulation and health risks of bisphenols in wild fish from West and North Rivers, South China**

**Yue-Hong Liu<sup>1,2,†</sup>, Jun-Wei Huang<sup>1,†</sup>, Zheng Huang<sup>1</sup>, Yu-Xian Mei<sup>1</sup>, Jian-Liang Zhao<sup>1,2</sup>, Guang-Guo Ying<sup>1,2</sup>**

<sup>1</sup>SCNU Environmental Research Institute, Guangdong Provincial Key Laboratory of Chemical Pollution and Environmental Safety & MOE Key Laboratory of Theoretical Chemistry of Environment, South China Normal University, Guangzhou 510006, Guangdong, China.

<sup>2</sup>School of Environment, South China Normal University, Guangzhou 510006, Guangdong, China.

<sup>†</sup>Authors contributed equally.

**Correspondence to:** Prof. Jian-Liang Zhao, School of Environment, Guangdong Provincial Key Laboratory of Chemical Pollution and Environmental Safety, South China Normal University, No. 378, Waihuanxi Road, Panyu District, Guangzhou 510006, Guangdong, China. E-mail: [jianliang.zhao@m.scnu.edu.cn](mailto:jianliang.zhao@m.scnu.edu.cn).

---

**Supplementary Table 1. Gradient elution of bioconcentrated samples**

Time/min	Mobile phase A	Mobile phase B
0	65%	35%
2	30%	70%
4	5%	95%
5	5%	95%
6.5	65%	35%

**Supplementary Table 2. UPLC-MS/MS parameters of the target analytes used in ESI negative mode**

Analyte	Internal standards	Retention time/min	MRM-transitions <sup>a</sup>	Cone/V	Collision/V
BPF	BPF-d10	1.61	199→93/77	20	22
BPF-d10 <sup>b</sup>		1.56	208.3→97/109.9	62	24/22
BPS-d8 <sup>b</sup>		0.73	257.2→95.9/111.9/159.9	56	32/26/22
BPE	BPA-d16	2.10	213.2→119.1/198.2	52	24/16
BPA	BPA-d16	2.6	227.1→133/212	31	25/17
BPB	BPAP-d5	3.35	241.1→211/212.1	30	28/17
BPA-d16 <sup>b</sup>		2.52	241.3→97.1/142.2	2	26/20
BPS	BPS-d8	0.75	249.1→92/108.1	30	34/27
BPC	BPAP-d5	3.93	255.3→147.1/239.2	35	25/28
BPZ	BPA-d16	4.32	267.1→173/224	30	24
BPC1	BPAP-d5	3.61	279→71/243	30	14/16
BPAP	BPAP-d5	3.91	289.1→195.1/274.1	20	28/20
BPAP-d5 <sup>b</sup>		3.88	293.2→199.1/278.1	2	30/22
BPTMC	BPP-d16	5.48	309.3→200.2/215.3	50	36/28
BPG	BPP-d16	5.41	311.4→175.1/295.1	20	32/24
BPAF	BPAP-d5	3.94	335.1→177.1/265	54	42/22
BPP	BPP-d16	5.48	345.3→315.3/330.3	62	34/28
BPBP	BPA-d16	4.92	351.3→258.1/274.0	62	24

BPP-d16 <sup>b</sup>	5.44	361.4→140.1/325.3	78	34/40	
BPPH	BPP-d16	5.63	379.3→209.2/364.2	80	32/24

<sup>a</sup> Precursor ion → production ions

<sup>b</sup> Internal standards.

**Supplementary Table 3. The concentrations of target compounds in surface water (ng/L)**

	NR1	NR2	NR3	NR4	WR1	WR2	WR3	WR4	WR5	WR6	WR7
BPA	193	26.9	39.8	57.7	25.5	44.7	144	36.4	55.8	21.2	75.3
BPAF	17.6	58.6	27.3	3.50	19.1	38.6	51.0	33.6	46.4	38.9	18.5
BPAP	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200
BPB	0.193	0.130	0.096	0.053	0.109	0.104	0.102	0.079	0.082	0.133	0.189
BPBP	0.100	0.104	0.073	0.058	0.100	0.100	0.100	0.100	0.100	0.100	0.100
BPC	1.22	0.316	0.362	0.147	0.236	0.406	0.349	0.333	0.330	0.325	0.305
BPCl	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300
BPE	0.250	0.250	0.250	0.175	0.250	0.250	0.250	0.225	0.058	0.250	0.250
BPF	177	181	240	303	128	54.6	76.2	216	71.1	38.7	44.3
BPG	0.169	0.130	0.101	0.327	0.089	0.183	0.250	0.178	0.181	0.050	0.106
BPTMC	0.107	0.050	0.050	0.055	0.050	0.050	0.054	0.050	0.050	0.050	0.050
BPP	0.076	0.128	0.116	0.250	0.116	0.182	0.149	0.063	0.117	0.124	0.250
BPPH	0.139	0.172	0.250	0.250	0.108	0.250	0.104	0.122	0.250	0.250	0.250
BPS	1.61	0.155	0.116	4.56	0.123	0.164	0.118	0.149	0.082	0.279	0.567
BPZ	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.250	0.173